D.P.U. 95-40

Investigation by the Department on its own motion as to the propriety of the rates and charges set forth in the following tariffs: M.D.P.U. Nos. 893 through 908, filed with the Department on March 15, 1995 to become effective April 1, 1995 by Massachusetts Electric Company.

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I. INTRODUCTION

A. Background

On March 15, 1995, Massachusetts Electric Company ("MECo" or "Company") pursuant to G.L. c. 164, § 94 filed with the Department of Public Utilities ("Department") a petition to increase its revenues by $62.1 million or 4.2 percent to become effective April 1, 1995. Alternatively, MECo filed an incentive proposal plan in which the Company's revenues would be adjusted annually based on a comparison of the Company's rates with the rates of other Massachusetts electric utilities. The Department docketed this case as D.P.U. 95-40, and on March 23, 1995, suspended the effective date of the proposed rates until October 1, 1995, pending investigation.

The Company supplies retail electric service to approximately 950,000 customers in 149 cities and towns in Massachusetts (Exh. AG-1-2, 1994 Annual Report). MECo is a wholly-owned subsidiary of the New England Electric System ("NEES"), a registered holding company under the Public Utility Holding Company Act of 1935 (id.). The NEES system includes three retail companies: MECo, Granite State Electric Company, and Narragansett Electric Company; a service company, New England Power Service Company ("NEPSCo"); and a wholesale electric generating and transmission company, New England Power Company ("NEP") (id.).

Pursuant to notice duly issued, the Department conducted three public hearings, and stated that any person who desires to participate in the adjudicatory proceeding concerning the Department's investigation must file a written petition for leave to intervene or to participate in the proceeding with the Department not later than seven days before April 18, 1995, the date of the first public hearing. The Attorney General of the Commonwealth ("Attorney General"), pursuant to G.L. c. 12, § 11E, filed a notice of intervention, and timely petitions to intervene or participate were filed by Cambridge Electric Light Company and Commonwealth Electric Company (together "ComElectric"); Commonwealth Gas Company ("ComGas"); Conservation Law Foundation ("CLF"); Western Massachusetts Electric Company ("WMECo"); Distrigas of Massachusetts Corporation ("Distrigas"); the Energy Consortium ("Energy Consortium"); the Industrial Intervenors ("Industrial Intervenors"); Irving Burstein, Pearl Noorigan and Jeannie Stephenson ("Low-Income Intervenors"); and Milford Power Limited Partnership ("Milford Power"). Late-filed petitions to intervene were filed by Wheeled Electric Power Company ("WEPCo") and Jane Walton, a ratepayer of Nantucket Electric Company.

The Department noted the Attorney General's intervention, and allowed CLF, the Energy Consortium, the Industrial Intervenors, Distrigas, the Low-Income Intervenors, and MPLP to participate as parties. In addition, the Department granted Jane Walton the right to participate as a limited participant for the purpose of submitting comments or briefs, and allowed ComElectric, ComGas, WMECo, and WEPCo to participate as limited participants for the purpose of submitting comments or briefs relating to the Department's review of the Company's incentive plan.

B. <u>Procedural History</u>

The Department conducted fifteen days of evidentiary hearings between May 11, 1995 and June 23, 1995. In support of its filing, the Company presented the testimony of Lawrence J. Reilly, vice president and director of rates for NEPSCo; John H. Dickson, president of MECo; Anthony C. Pini, vice-president and director of customer service for MECo; Michael F. Farrell, senior financial analyst for NEPSCo; William F. Dowd, director of compensation and benefits for

MECo; David C. Holt, executive vice-president of MECo; John G. Cochrane, vice-president and director of corporate finance for NEPSCo; Charles E. Olson, president of Olson and Company; and Peter T. Zschokke, manager of retail rates for NEPSCo. The Attorney General presented the testimony of Paul Chernick, president of Resource Insight, Inc.. The Low-Income Intervenors presented the testimony of Jerrold Oppenheim and Elliot Jacobson. The evidentiary record consists of 516 exhibits and the responses to 167 record requests.

On May 19, 1995, the Department issued a Request for Comments limited to the incentive mechanism of the Company's proposal.[1] Initial comments were submitted on June 2, 1995 by the Company, the Attorney General, CLF, ComEnergy, the Energy Consortium, the Industrial Intervenors, the Low-Income Intervenors, Milford Power, and Jane Walton. Reply comments were submitted by June 9, 1995 by the Company, the Attorney General, and Milford Power. On July 21, 1995, the Department issued an Order rejecting the Company's incentive proposal. Massachusetts Electric Company, D.P.U. 95-40-A (1995).

Iinitial briefs and reply briefs were submitted by the Company, the Attorney General, CLF, the Low-Income Intervenors, the Energy Consortium, and Jane Walton.[2]

II. RATE BASE

A. Additions to Utility Plant

1. Background

The Company's total rate base of $814,152,000 incorporates approximately $255,000,000

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[1] On May 23, 1995 the Department issued a Revised Request for Comments.

[2] The briefs submitted by the Attorney General, CLF, the Low-Income Intervenors, and the Energy Consortium included additional comments on the incentive plan.

invested primarily for new and upgraded distribution facilities; this accounts for $18.7 million of its $62.1 million revenue deficiency (Exhs. MECo-2, at 7; DPU-2-10R).

The Company designated its plant additions into several major groups based on the purpose of the project: reliability-related, load-relief, public requirements, new customer, addressing damages and failures, condemned poles replacement, streetlight, and general plant (Exh. DPU-2-10). The Company also distinguished the projects as blanket projects, regional projects, and specific projects, based on the estimated cost of the project (Tr. 13, at 24). The Company explained that, generally, blankets are those which cost less than $4,000, regional projects costs do not exceed $25,000, and specific projects cost more than $25,000 (id.).

Projects, depending on the type, receive different levels of review and justification prior to approval (Tr. 8, at 110). Thus, small blanket projects require limited justification and could be approved and accomplished at a "local level", while more expensive regional and specific projects are justified and approved by the regional or central authority, respectively (Tr. 13, at 24-26). According to the Company, approximately 30 percent of the projects completed from 1992 through 1994 were specific, and thus were approved for cost-effectiveness by a central justification process (id. at 24, 37-38). The Company presented documentation related to more than 2000 specific projects completed from 1992 to 1994 (RR-DPU-64).

2. Positions of the Parties

a. The Company

The Company contends that the $255,000,000 investment in plant additions is prudent, necessary, reasonable, and used and useful (Company Brief at 16). The Company asserts that substantial evidence exists that all the projects completed from 1992 to 1994 were necessary and cost-effective, and that the supporting documentation is thorough, comprehensive, and complete (id.). The Company notes that the level of recent investment in the distribution plant is consistent with the Company's historic level of investment, but lower than the average level of investment by other utilities (id. at 16-17). The Company states that the reliability of its distribution system is high when compared to the reliability of the distribution systems operated by other utilities (id. at 17). The Company argues that the $255,000,000 of distribution plant additions should be included in MECo's rate base (id. at 18).

According to an independent study of the reliability data from 42 electric utilities across the country, the reliability level of the Company's distribution system has been consistently higher than that of other utilities in New England and nationwide (RR-DPU-44). The Company contended that its investment in its distribution system has been consistently low in comparison to other utilities operating in Massachusetts (Exh. DPU-2-16). The Company also contended that its additions to the distribution plant from 1992 to 1994 have been consistent with the additions made prior to 1992 (Exhs. DPU-2-12; DPU-6-5). No other parties commented on this issue.

3. Analysis and Findings

a. Standard of Review

For costs to be included in rate base, the expenditures must be prudently incurred, and the resulting plant must be used and useful in providing service to ratepayers. Boston Gas Company, D.P.U. 93-60, at 24 (1993); Western Massachusetts Electric Company, D.P.U. 85-270, at 20 (1986).

A prudence review must determine whether the utility's actions, based on all that it knew or should have known at the time, were reasonable and prudent in light of the circumstances which then existed. Such a determination may not properly be made on the basis of hindsight judgments, nor is it appropriate for the Department merely to substitute its best judgment for the judgments made by the management of the utility.

Attorney General v. Department of Public Utilities, 390 Mass. 208, 229 (1983). In conducting a prudence review, the Department must base its findings on how a reasonable company would have responded to the particular circumstances and whether the company's actions were in fact prudent in light of all circumstances which were known or reasonably should have been known at the time a decision was made. D.P.U. 85-270, at 23-24; Boston Edison Company, D.P.U. 906, at 165 (1982). The prudence test determines whether cost recovery is allowed at all, while the used and useful analysis determines the
portion of prudently incurred costs on which the utility is entitled to earn a return.
D.P.U. 85-270, at 25-27.

b. Analysis and Finding

As an initial matter, the Department notes that the additions to the distribution system made during the three-year period from 1992 to 1994 represent more than 30 percent of the Company's total rate base (Exh. MECo-2, at 7). Further, the impact on the cost of service from the proposed additions represents approximately 30 percent of the Company's revenue deficiency (Exhs. MECo-10, MFF-1, DPU-6-1). Despite this, the Company's direct testimony on its additions to the transmission and distribution plant is very limited (Exh. MECo-2, at 7-8). When seeking recovery of expenditures, it is incumbent upon each company to present adequate information to the Department in a clear and reviewable manner.[3]

The Department has cautioned utility companies that, as they bear the burden of demonstrating the propriety of additions to rate base, failure to provide clear and cohesive reviewable evidence on rate base additions increases the risk to the Company that the expenditures will be disallowed. See D.P.U. 93-60, at 26; see also, Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, at 304 (1978); Metropolitan District Commission v. Department of Public Utilities 352 Mass. 18, at 24 (1967). In this instance, the Department questioned the Company extensively on its additions to rate base by way of cross-examination and record requests in order to develop an adequate record. Because the presentation of essential information in response to a record request degrades the efficient conduct of the proceeding, imposing limits on Department and intervenor review, this is an approach that will not be tolerated in the future.

The Company eventually provided project sheets and documentation for over 2,000 distribution projects completed from 1992 to 1994, including justification for all investments over $25,000. The record also shows that the Company has achieved a relatively high level of reliability on its distribution system. In addition, the record is clear that from 1992 to 1994, the Company's investments in its distribution plant are consistent with the level of past investments. Based on the record, the Department finds that the distribution plant additions made by the Company from 1992 to 1994 are prudent, and are used and useful. Therefore, the Department finds that inclusion of the additions to the Company's distribution plant in rate base is appropriate.

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3 The Company's failure to provide sufficient information in its direct testimony regarding its additions to the distribution plant is particularly troublesome in light of the magnitude of the expenditures involved.

B. Cash Working Capital

1. The Company's Proposal

The Company stated that, depending on the time that revenues are received and expenses are paid, it may have either a positive or negative working capital requirement (Exh. MECo-3, at 43-44). In its filing, the Company submitted a lead-lag study which proposed a total working capital allowance of $29,486,000 (Exh. MECo-3, exh. MFF-10, at 20). The Company developed payment lags for eight general expense categories, including: (1) operation and maintenance expense; (2) purchased power; (3) federal income taxes; (4) state income taxes; (5) municipal taxes; (6) state unemployment taxes; (7) federal unemployment taxes; and (8) FICA expenses (Exh. MECo-3, exh. MFF-14, at 1). The Company first developed a payment lag of 36.76 days which represented the number of days between meter reading and customer payment (Exh. MECo-3, exh. MFF-12, at 2). This factor was then restated as a percentage of the number of days in the year, i.e., 10.07 percent (id.). MECo then developed payment lags for each of the general expense categories described above which resulted in payment lags ranging from 28.92 days to negative 69.83 days, depending upon the expense category (id. at 12, 14). The Company restated these payment lags as a percentage of the total days of the year and added the customer payment factor of 10.07 percent as stated above (id. at 5-20). The results of the lead-lag analysis indicated aggregate lag percentages ranging from positive 17.99 percent to negative 9.06 percent, depending upon the particular expense category (id.). These individual percentages were multiplied by the Company's proposed expense for each category, which when totaled resulted in a cash working capital allowance of $29,486,000 (Exh. MECo-3, exh. MFF-10, at 20).

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Company has grossly overstated the cash working capital allowance in its rate base by making unsupported assumptions about its revenue and expense lags (Attorney General Brief at 17). Using the Company's balance sheets from its recent quarterly Securities and Exchange Commission Report 10-K and annual reports to calculate cash working capital, the Attorney General asserts that the Company actually has a negative cash working capital requirement of $39,924,000, because its total assets are greater than total liabilities by that amount (id. at 14-16, citing Exhs. AG-1-1; AG-1-2). The Attorney General concludes that this negative requirement should be substituted for MECo's proposed working capital allowance (id. at 16-17).

In addition, the Attorney General claims that MECo's cash working capital study contains two errors (id.). First, according to the Attorney General, the Company failed to include the lags associated with interest and preferred dividend payments (id.). The Attorney General estimates that correcting the alleged error would result in a negative working capital requirement of 10.76 percent on interest expense (Attorney General Brief at 18, citing Exhs. MECo-12, at 2; MECo-3, exh. MFF-10, at 18; Tr. 14, at 59).[4] Second, the Attorney General contends that the Company's calculation of 8.27 percent expense lag for other O&M expenses is overstated.[5] The Attorney General maintains that the Company incorrectly assumes that vendors bill the Company for

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[4] The Attorney General asserts that this percentage should be applied to the Department-allowed interest expense (rate base times cost of long term debt) in the Company's return on rate base (Attorney General Brief at 18).

[5] Total O&M expense consists of weekly payroll, monthly payroll, NEPSCo billings, and other O&M expenses (Exh. MECo-3, exh. MFF-12, at 20).

service on the same day that the service is provided (id.). As a solution, the Attorney General developed a proxy billing lag for vendors, using data on the Company's own billing lags to customers (id.). The Attorney General concluded that, rather than the 8.27 percent expense lag, a more appropriate lag is 3.15 percent (id. at 20, citing Exh. MECo-3, exh. MFF-12, at 4, 20).

b. The Company

The Company contends that the Attorney General's suggestion to abandon the lead-lag study approach and rely instead on the difference between current assets and current liabilities, the "balance sheet" approach, has been rejected by the Department (Company Brief at 24, citing NYNEX, D.P.U. 94-50, at 304 (1995); Commonwealth Electric Company, D.P.U. 89-114/90-331/91-81, at 20-21. With respect to the Attorney General's assertion that the Company failed to include the lags associated with interest and preferred dividend payments, MECo agrees that rate base and the cash working capital allowance calculations should incorporate those changes (Company Brief at 26). The Company developed a revised lead-lag factor, using its actual payment patterns, which developed a slightly greater reduction to rate base than that proposed by the Attorney General (id. at 26, n.8). Agreeing with the Attorney General's contention that the 8.27 percent expense lag is overstated, MECo submits that the total O&M expense lag should be reduced from 9.82 percent to 6.80 percent (id.).[6]

3. Analysis and Findings

In its day-to-day operations, the company requires cash working capital to pay for its

[6] This is derived by subtracting the revised lag of 3.15 percent from the original lag of 8.27 percent and multiplying that by 59.05 percent, which is the proportion of other O&M expense to total O&M expense (Company Brief at 27; Exh MECo-3, exh. MFF-12, at 20).

operation and maintenance ("O&M") expenses as well as its fuel and purchased power expenses. The cash working capital is provided either through funds internally generated by the company (i.e., retained earnings) or through short-term borrowing. D.P.U. 93-60, at 47. The Department has recognized that a time lag occurs between a utility's payments for O&M expenses and customers' payments for services received. D.P.U. 89-114/90-331/91-80, at 10.

The time lag involves two components: (1) the number of days between the delivery of electric service by the Company and the receipt of payment from customers ("lag days"); and (2) the number of days taken by the Company to pay its O&M expenses ("lead days"). Id. The difference is the net lag. The net lag is then applied to annual O&M expenses to determine the average amount of working capital the Company must have on hand to cover any lag in recovery of revenues for services rendered. This reimbursement is accomplished by adding a cash working capital component to the Company's rate base computation. D.P.U. 93-60, at 47-48.

For the calculation of cash working capital, the Department has traditionally relied on a 45-day convention. Boston Gas Company, D.P.U. 88-67, Phase I at 32-33 (1988). The Department has adopted the results of a lead-lag study only if the results of a lead-lag study produce a significantly different result than the results obtained from a 45-day convention. Cambridge Electric Light Company, D.P.U. 92-250, at 22 (1993). The Department, however, has encouraged parties in Department proceedings to consider and offer alternatives of a period less than the 45-day convention, with supporting justification. See D.P.U 93-60, at 50. The Department finds that the Company's lead-lag study is justified and consistent with D.P.U. 93-60. The Department has consistently rejected the Attorney General's balance sheet method for calculating cash working capital. See D.P.U. 89-114/90-331/91-80, at 21; D.P.U. 94-50, at 304.

The Department has found this approach to be without merit. D.P.U. 94-50, at 304.

Regarding whether the cash working capital study was performed correctly, the Company revised its cash working capital study to include the lags associated with interest expense and preferred dividend payments. The Department finds that including the lags associated with interest expense and preferred dividend payments is consistent with Department precedent and is appropriate. Western Massachusetts Electric Company, D.P.U. 88-250, at 21-23 (1989). With respect to the expense lag for other O&M expenses, the Company's recalculated expense lag of 3.15 percent accurately reflects its payments to vendors. Accordingly, the cash working capital allowance shall reflect the lag percentages as stated in the Company's brief. Because the calculation of cash working capital is based on the prospective cost of service, the Department adjusts the Company's cash working capital allowance to reflect the rate base, cost of long-term debt and O&M expenses approved in this Order. Accordingly, MECo's cash working capital allowance is provided in Schedule 6, below.

III. EXPENSES

A. Employee Compensation

1. Introduction

The Company states that employee copayments toward health care expenses, along with salary and wage increases, as discussed below, result in a reasonable overall compensation policy (Exh. MECo-3, at 16). This section on compensation includes (1) payroll (union and nonunion) and (2) health care. In Sections III.A.2. and III.A.3., below, the Department reviews the Company's proposed employee compensation adjustments and the parties' positions on whether these adjustments are known and measurable. In Section III.A.4., below, the Departments reviews the reasonableness of the proposed expenses.

2. Union and Nonunion Salary and Wage Increases

a. The Company's Proposal

In its filing, the Company sought to increase the test-year O&M expense by $4,747,000 to adjust for salary and wage increases for MECo's and NEPSCo's union and nonunion personnel (Exh. MECo-3, exh. MFF-10, at 6). Its proposed adjustments to test-year payroll include an elimination of salaries and wages associated with the Company's conservation and load management programs, which are recovered outside of base rates (Exh. MECo-3, at 3, 5).

MECo separated test-year payroll charged to O&M expense into two categories: (1) union; and (2) nonunion (id. at 3-6).[7] The Company then increased MECo's and NEPSCo's adjusted union test-year payroll by 4.64 percent from October 1994 through May 15, 1995 and by 5.1 percent from May 16, 1995 through March 1996 to account for payroll increases agreed upon during contract negotiations (Exhs. MECo-3, exh. MFF-10, at 3, 5; MECo-7, at 7). The Company also increased MECo's and NEPSCo's adjusted nonunion test-year payroll by 4.2 percent from October 1994 through December 1994 and by 3.2 percent from January 1995 through December 1995, to account for what MECo described as "committed" pay increases (Exh. MECo-3, at 8, exh. MFF-10, at 3, 5).

In support of its proposed increase, the Company provided the following surveys and compensation studies: William M. Mercer, Inc. - 1994/1995 Compensation Planning Survey -

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7 Based on test-year salaries and wages, the Company determined that the percentages of MECo union and nonunion employees were 71.94 percent and 28.06 percent, respectively (Exh. MECo-3, exh. MFF-10, at 4). The percentages for NEPSCo union and nonunion employees were 34.8 percent and 65.2 percent, respectively (id. at 6).

National and New England Results; Wyatt Data Services, Inc. - 1994-1995 Salary Budget Survey; American Compensation Association - 1994-1995 Report on the Salary Budget Survey; Hewitt Associates - 1994 and 1995 Salary Increase Survey Report; and Towers Perrin - 1995 Salary Management Planning Survey (Exh. MECo-3, exhs. MFF-1, MFF-2, MFF-4; workpapers MFF-1 through MFF-5; RR-DPU-59). The Company stated that it no longer performs a formal comparison of its union wages with non-utility companies in its service territory, due to the unique nature of the jobs performed (Exh. MECo-3, at 8). In addition, the Company indicated that it did not perform such a comparison of union or nonunion wages with other utilities in the country, because the wage differences between New England and other areas of the country make the comparison inaccurate (id.). MECo asserts that since the Department found the test-year level of its nonunion salary and wages to be reasonable in its prior rate case, the Company presented comparisons of its merit pay increases with increases by various other firms since 1991 (Exhs. DPU-4-6; MECo-3, exh. MFF-4).

i. Union Wage Increase

The Company proposed a salary and wage adjustment for MECo and NEPSCo union personnel of $2,973,000 and $541,000, respectively, to reflect the percent increases granted to MECo's and NEPSCo's union employees during the period from the test year to the midpoint of the year in which new rates take effect ("the rate year") (Exh. MECo-3, exh. MFF-10, at 6).

The Company's union wage increases are granted by MECo pursuant to the terms of the Company's respective union contracts (id. at 7). The Company signed labor contracts with all three of its unions on May 12, 1995, allowing for varying wage increases from May 12, 1995 to May 11, 1999 (Exh. MECo-7, Schs. WFD-1-3). The 5.1 percent proposed to be included in the cost of service consists of the following increases: (1) a one percent increase in base wages; (2) a 2.1 percent guaranteed lump sum payment paid at the beginning of each contract year, based on the total annual compensation during the preceding contract year; and (3) a two percent performance-based bonus paid at the end of each contract year, assuming a payout determined by the mid-level earnings-per-share ("EPS") target of NEES for the preceding calendar year (Exh. MECo-7, Schs. WFD-1-3).

ii. Nonunion Salary and Wage Increases

The Company proposed a salary and wage adjustment for MECo and NEPSCo nonunion personnel of $660,000 and $573,000, respectively (Exh. MECo-3, exh. MFF-10, at 3-6). The Company stated that it offered both its MECo and NEPSCo nonunion employees an overall merit salary and wage increase of 3.2 percent for 1995 (Exh. MECo-3, at 8). The Company also stated that it made a commitment to grant this percent merit increase to each of its nonunion employees on his or her anniversary date (Exh. AG-1-43). Further, the Company stated that pay increases to nonunion employees have been consistent with, but slightly greater than union increases and that it is management's intention to maintain that relationship in the future (Exh. MECo-3, at 9). MECo indicated that the merit pay increase is designed to provide competitive pay for the skills, contributions, and experience each person brings to a specific job (id. at 8). MECo claimed that the nonunion salary increase meets the Department's standard, because (1) there is an express commitment by management to grant the increase, (2) there is an historical correlation between union and nonunion salaries and wages, and (3) the amount of the increase is reasonable (id. at 9). The Company referred to the compensation studies provided to illustrate the reasonableness of the increase (Exh. MECo-3, exh. MFF-4, at 1-5).

b. Positions of the Parties

i. The Attorney General

Regarding the union increases, the Attorney General urges the Department to reject the two percent incentive bonus portion of the Company's proposed 5.1 percent union increase for the following reasons: (1) the Company's incentive bonus for its union employees does not meet the Department's standard of a known and measurable expense; (2) the incentive bonus is unreasonable in amount; (3) the Company already recovers the cost of the incentive bonus through improved productivity; and (4) the incentive bonus is redundant with the NEES Goals program already provided by the Company (Attorney General Brief at 28-30).[8]

First, regarding the known and measurable standard, the Attorney General contends that there are too many variables in the determination of the bonus, i.e., the EPS of NEES and the employees' incentive plan goals, to know at what level, if any, a bonus would be paid (id. at 28, citing Exh. MECo-7; Memorandum of Understanding, IBEW at 1 and Att. 1, at 2-3; Memorandum of Understanding, BUWNE at 1 and Att. 1, at 1-3; Memorandum of Understanding, AFL-CIO at 1 and Att. 1, at 2). Second, the Attorney General claims that contrary to the Company's contention that the 5.1 percent increase is in line with inflation rates of 2.4 to 3.5 percent, the incentive bonus is part of the Company's proposed union increase for the first year, and is well above the estimated rates of inflation for 1995 through 2001; thus, the incentive bonus is unreasonable (Attorney General Brief at 29; Attorney General Reply Brief at 11). Third, the Attorney General argues that the incentive bonus is supposed to cause

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[8] Percentage increases on salaries are available to all employees if the EPS of NEES falls within a certain range, and if individual and departmental goals are achieved (Exh. MECo-3, exh. MFF-3, at 2).

employees to work more productively, so that any inclusion in the cost of service of the bonus would allow the Company to recover twice for those costs (id. at 30). Finally, the Attorney General points out that during the test year, the Company paid out over $2 million in incentives and maintains that since the Company already provides an incentive bonus to its union employees through its NEES Goals program, the addition of the incentive bonus in the union contracts is redundant (id.).

The Attorney General's recommendation would result in an $852,000 reduction to MECo's proposed adjustment (RR-AG-50, at 6).

ii. The Company

In response to the Attorney General's first argument that the incentive bonus portion of the union increase is not known or measurable, MECo states that the Department has previously allowed recovery of incentive compensation plans that are reasonably designed to encourage good employee performance (Company Brief at 43, citing D.P.U. 93-60, at 98-101 (1993); Bay State Gas Company, D.P.U. 92-111, at 115-116 (1992); Massachusetts Electric Company, D.P.U. 89-194/195, at 34 (1990)). The Company asserts that in each of the cited cases, the plans were tied to earnings and that the Department approved the plans despite the uncertainty that the payout was reasonably estimated (Company Brief at 43). MECo claims that the EPS target can be lowered but not increased, and that the mid-level payment is the most likely payout amount based on the eleven year history of the NEES Goals program (id.). Therefore, MECo asserts that the bonus incentive portion of the union contracts is known and measurable and fully meets the Department's standards for inclusion in rates (Company Reply Brief at 10, citing D.P.U. 94-50, at 333-334).

In response to the Attorney General's argument that the incentive bonus portion of the union increase is not reasonable in amount, MECo argues that the overall compensation package, including the incentive payment is reasonable, because it is consistent with the levels of inflation and is well below most of the union contracts negotiated by other New England utilities for the same period (Company Brief at 44; Company Reply Brief at 11).

Regarding the Attorney General's argument that MECo has not accounted for productivity gains, the Company asserts that the savings realized by its management restructuring has reduced the Company's annual number of employees over the period 1991 to 1994 and is properly reflected in the cost of service (Company Brief at 45). Further, MECo argues that specific productivity improvements associated with the union contracts are not known and measurable (Company Reply Brief at 11 n.3).

As to the Attorney General's argument that the incentive bonus portion of the union increase is redundant with the NEES Goals program, the Company argues that the eleven performance measures for the union employees cover more areas and are more detailed than the NEES Goals Program, while maintaining consistency with the program's overall objectives (id. at 46, citing Tr. 11, at 43-53).

For the reasons enunciated above, the Company maintains that the incentive bonus portion of the union increase should be allowed in the cost of service (Company Brief at 43-46).

c. Analysis and Findings

i. Union Payroll

The Department's standard for union payroll adjustments requires that three conditions be met: (1) the proposed increases must take effect before the midpoint of the rate year; (2) the proposed increases must be known and measurable, i.e., based on signed contracts between the unions and the company; and (3) the proposed increases are demonstrated to be reasonable. Massachusetts Electric Company, D.P.U. 92-78, at 19-20 (1993); D.P.U. 92-111, at 98; Commonwealth Gas Company, D.P.U. 87-122, at 54-55 (1987); Bay State Gas Company, D.P.U. 1122, at 26 (1982).

The record shows that the Company's proposed adjustments include only those increases that will be granted before the midpoint of the rate year (i.e., before March 1, 1996) (Exh. MECo-3, exh. MFF-10, at 3-6). Accordingly, the Department finds that the Company has satisfied the first requirement listed above.

In regard to the requirement that the proposed increases be known and measurable, we note that the increases are based on signed union contracts (Exh. MECo-7). As noted, the Attorney General argues that the incentive bonus portion of the union increases should be disallowed because they are not known or measurable. The Company projected the payout percentage based on the mid-level EPS target. Even if union employees fail to achieve 100 percent of their performance measures, the performance-based bonus would be distributed at the end of the next contract year (Exh. MECo-7, Sch. WFD-1, Att. I, at 2, Sch. WFD-2, Att. I, at 2, Sch. WFD-3, Att. I, at 2). Accordingly, the Department finds that the Company has satisfied the second requirement listed above.

We address the reasonableness of the Company's union payroll expense in Section A.4., below.

ii. Nonunion Payroll

In deciding the propriety of prospective nonunion wage adjustments, the Department applies a three-part standard. To meet this standard, a company has the burden of demonstrating (1) an express commitment by management to grant the increase, (2) an historical correlation between union and nonunion raises, and (3) an amount of increase that is reasonable. Fitchburg Gas and Electric Light Company, D.P.U. 1270/1414, at 14 (1983). Regarding the requirement to demonstrate management's express commitment to grant the increases, the Company submitted written notification, i.e., a human resources newsletter, of the 1995 increase in employee compensation by the director of compensation and benefits (Exh. MECo-3, exh. MFF-3). Therefore, the Department finds that an express commitment has been demonstrated. Regarding the requirement to establish an historical correlation between union and nonunion annual payroll increases, the Company submitted a comparison of the annual payroll increases for its union and nonunion employees over the previous ten years (Exh. MECo-3, at 9). The Department finds that this comparison provides sufficient demonstration of the historical correlation between union and nonunion annual increases.

We address the reasonableness of the Company's nonunion payroll expense in Section A.4., below.

3. Health Care Expenses

a. The Company's Proposal

The Company requested a total adjustment of $216,000 to its test-year health care expense (Exh. MECo-3, at 15, exh. MFF-10, at 8). During the test year, the Company booked $4,627,000 in health care expenses for MECo, $1,542,000 in health care expenses for NEPSCo, and $16,000 to other MECo-related companies who supplied MECo with services, for a total test-year expense of $6,185,000 (id.). The Company indicated that MECo and NEPSCo are self-insured for most of their health care costs, which entails paying the actual costs of providing the health care plus the administrative costs (Exh. MECo-3, at 15; Tr. 14, at 22). The Company developed a weighted percentage increase in health care expense based on the actual participation of MECo and NEPSCo employees during the test year plus the working premiums for each individual health plan for 1995 (Exh. DPU-4-9). The working premiums comprise estimates of the Company's anticipated actual health care costs based on actuarial assumptions provided by the Company's consultant, Towers Perrin (Exh. AG-3-6, at 1).[9] The consultant determined a health care trend rate of 4.5 percent for health maintenance organizations ("HMOs") and 14 percent for the Company's indemnity plan, Blue Cross and Blue Shield ("BC/BS"), based on a September 7, 1994 study ("1994 Towers Perrin Report") (id. at 6; Tr. 14, at 25).

The Company indicated that since May 1986, MECo and NEPSCo employees have helped to defray the cost of health care (Exh. MECo-3, at 15-16). MECo pointed out that the percentage of employee contribution toward health care premiums has increased from eleven percent during 1990 to 26 percent during the test year (id. at 16). In addition, the Company instituted a policy beginning January 1, 1996, in which both union and nonunion employees will

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9 The Attorney General moved to strike, as unresponsive, a letter from the Company's consultant attached to the response to RR-AG-46. The response contained information beyond the scope of the request, and Attorney General's motion is granted. The Department notes that the Company did not, on brief, rely on those portions of the responses.

pay 30 percent toward the cost of BC/BS coverage, 25 percent toward the cost of conventional HMO coverage, and 20 percent toward the cost of enhanced HMO and basic plan coverage (Exh. MECo-7, at 8, Schs. WFD-1 - WFD-3, Att. 2).[10] The Company's contribution toward the cost of these providers will diminish over the next four years (id.; Tr. 11, at 69).

A net increase of 3.41 percent or $158,000 was calculated for MECo employees, while a net increase of 3.78 percent or $58,000 was calculated for NEPSCo employees, totalling $216,000 (Exh. MECo-3, exh. MFF-10, at 8, workpaper MFF-11). This calculation incorporates both the actuarial-determined health care trends and the increased employee contribution toward BC/BS (id.).

In order to substantiate the reasonableness of its adjustment, the Company provided the following comparisons: (1) employee contribution toward health care from 1990 to 1993 and the test year; (2) employee contribution toward health care as of July 1, 1994 in relation to other New England utilities; and (3) a five-year summary of the Company's health care expenses (Exh. MECo-3, at 16, exhs. MFF-6, 7).

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10 Conventional HMOs provide coverage under a network of providers only. The Company designated Pilgrim and HMO Blue to fall under this category of HMOs (Tr. 11, at 67-68). Enhanced HMOs allow the patient to go outside of the HMO provider list and receive partial coverage from an out-of-network provider. The Company designated Harvard [Community Health Plan] in eastern Massachusetts, Fallon in central Massachusetts, and Community Health Plan in western Massachusetts to fall under this category of HMOs (id.).

b. Positions of the Parties

i. The Attorney General

The Attorney General urges the Department to reject MECo's health care adjustment, which assumes a 4.5 percent and six percent increase for enhanced and conventional HMOs, respectively, and a 14 percent increase for BC/BS. Instead, the Attorney General recommends that the Department approve an adjustment of a two percent decrease for HMOs and a two percent increase for BC/BS (Attorney General Brief at 34, citing RR-AG-46). According to the Attorney General, the health care trend rates used by the Company are inappropriate and inconsistent with other studies (Attorney General Brief at 33, citing Exh. AG-1). In support of his contention, the Attorney General points to a new survey by Towers Perrin, that projected that 1995 health care costs would not grow at anywhere near the rate indicated in the 1994 Towers Perrin Report (id.). The Attorney General also argues that the Company has no incentive to obtain the best estimate from the actuary, since the Company simply pays the actual health care bills as they come in (id.). Therefore, the Attorney General advocates a $583,000 decrease to the cost of service, which incorporates both his recommended health care trend rates and the increase of employee contribution toward BC/BS implemented by the Company (id. at 34; RR-AG-46).

ii. The Company

According to MECo, the Attorney General's recommended health care adjustment is incorrect (Company Brief at 46). The Company contends that the survey results referenced by the Attorney General measure overall budgeted plan costs that include the effects of expected increases in direct medical costs, offset by changes in the mix of employees, reductions in employee numbers, changes in the selection of insurers and HMOs, increases in employee copayments, and reductions in administration costs (Company Brief at 47-48, citing Exh. AG-1). Thus, MECo claims that the application of the lower rate for overall plan costs to medical costs double-counts the savings produced by the management of the plans (Company Brief at 47-48). MECo asserts that although several steps toward controlling health care costs reduced the overall budgeted plan costs, these steps did not reduce the medical inflation rate; rather they offset the increases in medical costs that would have otherwise occurred (id. at 48). The Company acknowledges that the 1995 Towers Perrin Report determined that companies that are self-insured for most of their health care costs, such as MECo, should expect an escalation of two percent in 1995 (id. at 49, citing Exh. AG-1, at 1). However, MECo states that the 3.5 percent adjustment for total medical plan average costs included in its cost of service, which is reasonable, because the Company took significant steps to control health care costs before most other companies, whose initial efforts are now producing a lower average projected escalation rate (Company Brief at 49). MECo argues that the outcome of the Attorney General's recommendation of a 9.4 percent decrease to the test-year health care costs reflects double-counting and is unrealistic and unreasonable (id. at 50). Therefore, the Company argues that the Attorney General's suggested adjustment should be denied (id.).

b. Analysis and Findings

The Department requires that test-year health care expenses and post test-year adjustments be (1) known and measurable and (2) reasonable in amount. D.P.U. 92-78, at 29-30; North Attleboro Gas Company, D.P.U. 86-86, at 8 (1986). In addition, the Department requires that utilities contain their health care costs. D.P.U. 92-78, at 29; Nantucket Electric Company, D.P.U. 91-106/138, at 53 (1991).

The Company's test-year health care costs are based on the actual claim experience for its employees (Exh. MECo-3, at 15). Therefore, the test-year expense is known and measurable. The Company has demonstrated that it has taken steps to control health care costs, such as self-insuring and increasing employee contributions when more expensive health care providers are selected. Since the Company no longer pays premiums for health care, actuarial estimates determined the post test year health care adjustment (Exh. AG-3-6). Although this adjustment would not be considered known and measurable under Department precedent, the Department finds that disallowance on that basis would provide a disincentive for companies to control their expenses aggressively. See Berkshire Gas Company, D.P.U. 92-210, at 43-44 (1993). Therefore, the Department finds that the adjustments to test year health care expenses meet the Department's first requirement.

We address the reasonableness of the Company's proposal in Section A.4., below.

4. The Reasonableness of Employee Compensation Expenses

The Department has previously stated that, in determining the reasonableness of a company's employee compensation expenses, we will review the company's overall employee compensation expenses to ensure that its employee compensation decisions result in a minimization of unit-labor costs. D.P.U. 92-250, at 55. This approach recognizes that the different components of compensation (e.g., wages and benefits) are, to some extent, substitutes for each other, and that different combinations of these components may be used to attract and retain employees. Id.

The Department also requires companies to demonstrate that their total unit-labor costs are minimized in a manner that is supported by their overall business strategies. Id. However, the individual components of a company's employee compensation package will be appropriately left to the discretion of the company's management. Id. at 55-56.

To enable the Department to determine the reasonableness of a company's total employee compensation expenses, companies are required to provide comparative analyses of their employee compensation expenses. Id. at 56. Both current total compensation expense levels and proposed increases should be examined in relation to other New England investor-owned utilities and to companies in a utility's service territory which compete for similarly-skilled employees. Id.

In addition, to the extent possible, companies are required to provide productivity comparisons (i.e., output per worker-hour, or a similar index). Id. This enables the Department to evaluate whether a higher-cost compensation package is associated with correspondingly higher productivity and value. Id. If this association exists, the resulting unit-labor costs may be minimized, notwithstanding higher compensation, thus benefiting ratepayers. Id.

The Company did not present comparative analyses regarding overall employee compensation.[11] Specifically, the Company failed to provide the following comparative studies that have been required since its last rate case: (1) nonunion salary levels in relation to other New England investor-owned utilities; (2) nonunion salary levels and increases among companies in the service territory that compete for similarly-skilled employees; (3) union wage levels in the service territories for companies that compete for similarly-skilled employees; (4) health care expense levels and increases in relation to other New England investor-owned utilities; and (5) health care expense levels and increases in relation to companies in the service territories that compete for

[11] In future cases, the Department directs MECo and all companies to present their proposals regarding components of employee compensation in terms of a total employee compensation package.

similarly-skilled employees. D.P.U. 92-78, at 19-20, 25-26, 30. The Company's rationale for providing nonunion salary increases since 1991 as an alternative to a comparison of nonunion salary levels does not meet the standard. Fluctuations in market conditions necessitate the examination of salary levels in order to determine whether they are appropriate rather than merely looking at increases to a once-approved level.

The Company's compensation witness, Mr. Dowd indicated that internal productivity measurements, such as reliability of service, the average minutes and duration of outages, and the rate of accidents are parameters used to determine employees' bonuses in the NEES Goals program (Tr. 11, at 81-82). However, he testified that it is increasingly difficult to share information with other utility companies, so that the only productivity measurements that can be compared among companies are those that are publicly available such as earnings or return on equity (id. at 83). Further, Mr. Dowd stated that the measurement system that has been adopted by NEES may not have been adopted in its identical fashion by others and that may make comparisons difficult (id. at 84). On brief, MECo pointed to areas where it provided comparisons of customers per employee and payroll costs as a percentage of operating revenue to those of Boston Edison Company and Northeast Utilities, but did not present these results as a substantiation of its employee compensation (Company Brief at 45, citing Exhs. AG-1-10, at 14; AG-7-14, at 1, 4).

Therefore, the Department finds that the Company has not sufficiently demonstrated the reasonableness of its proposed total employee compensation expenses, because the Company did not provide the requisite comparative analyses. D.P.U. 92-78, at 19-20, 25-26, 30; D.P.U. 92-250, at 55-56. Accordingly, the Department disallows the adjustments associated with the

Company's union and nonunion employees with one exception and disallows the adjustment associated with the Company's proposed health care expenses. With regard to the Company's proposed union payroll, the Department approved in MECo's last rate case the adjustments associated with the union contracts signed for three one-year terms ending May 11, 1995 for two of the unions and ending May 20, 1995 for the other union. D.P.U. 92-78, at 16 n.12. Those contracts were effective prior to the issuance D.P.U. 92-250, which established the standard regarding employee compensation. Therefore, the Department will allow the recovery of adjustments for the contracts that went into effect before May 16, 1995, in the amount of $1,349,000. The remaining $2,165,000 shall be disallowed.

With regard to the Company's proposed nonunion payroll, the Department disallows the entire proposed adjustment of $1,233,000. Further, the Department disallows that portion of the Company's test-year nonunion payroll expenses in the amount of $1,984,000,[12] because the Company did not substantiate the increases that went into effect since the level approved in the Company's prior rate case.[13] The Department disallows the Company's proposed health care

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12 The Department derived this amount by determining the time period upon which to base the calculation and then applying the percentage increases granted by the Company during that time period to the nonunion test-year level presented in this case. Since the last approved non-union wage increase was through December 31, 1992, the time period the Department examined was between January 1, 1993 and September 30, 1994. The Company granted a 3.8 percent increase during 1993 and a 4.2 percent increase during 1994 (Exh. MECo-3, at 9). The equation is as follows:
$28,139,000 X (.038) = $1,069,282
$29,054,000 X (.042 X 9/12 of one year) = $915,201
$1,069,000+$915,000 = $1,984,483.

13 Since, in MECo's prior rate case, the Department approved the adjustments associated with union contracts signed for three one-year terms, the Department will allow the expenses associated with such contracts for union employees.

adjustment of $216,000, because the Company has not sufficiently demonstrated the reasonableness of its proposed health care expenses in terms of its total employee compensation expenses.

Based on the findings described above, the Company's cost of service shall be reduced by $5,599,000 ($3,398,000+$1,985,000+$216,000). The Department also makes the corresponding adjustment to FICA in Schedule 7, below.

B. Uninsured Claims

1. The Company's Proposal

The Company proposed a $6,304,000 increase to the cost of service for uninsured claims (Exh. MECo-3, exh. MFF-10, at 12). The uninsured claims expense consists of two components: (1) accruals and (2) cash payments for settlements and litigated awards. The accruals are cost estimates for casualty claims that occurred in the test year or revised estimates for previous casualty claims that are not unresolved (Exh. MECo-3, at 28). During the test year, MECo booked a negative $4,645,000 in uninsured claims (id.). This reflected the resolution during the test year of a dispute with an insurance carrier which resulted in a reversal of a prior year's booking to the account (id.). After comparing its uninsured claims test year expense of negative $4,645,000 against a five-year average of $1,659,000, MECo proposed an adjustment of $6,304,000.

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that a substantial amount of the claims made against the Company were due to the Company's imprudence and should not be included in the five-year calculation (Attorney General Brief at 45). The Attorney General further contends that since the Company paid out $5,163,750 in injuries and damages claims during the test year, which is almost four times greater than the amounts paid in either of the previous two years, a review of those claims is appropriate (id. at 46). The Attorney General focuses on a specific payment to a plaintiff in 1994 and recommends that because the underlying claim is due either to negligence on the Company's part or costs that the Company should have sought from another party, this claim should be eliminated from the five-year average calculation (Attorney General Brief at 47).[14] The elimination of this payment would reduce the five year-average by $610,000 and would reduce the cost of service adjustment from $6,304,000 to $5,694,000 (id. at 47, 48).

b. The Company

MECo argues that the Attorney General's contention that MECo should not be allowed to reflect in rates payments associated with claims of negligence is flawed (id.). The Company asserts that if that were the case, all claims payments would be excluded from the cost of service and a significant cost associated with providing service would not be recovered in rates (id.).

According to the Company, the dispute with its insurer was whether this particular type of claim was covered under the policy (Company Brief at 57). MECo contends that the resolution resulted in the insurer making a significant contribution toward the claim (id.). Therefore, MECo asserts that the payment of its deductible amount was prudent (Company Reply Brief at 18). According to MECo, the Department previously has allowed claims when insurers have made a significant contribution and that the "lumpiness" of payments is rectified by use of the five-year

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14 The Attorney General points out that the Company's insurer paid a significant portion of this claim (Attorney General Brief at 47).

averages (Company Brief at 57, citing D.P.U. 92-78, at 42-43). Therefore, MECo argues that its recovery of this claim should be allowed in the cost of service as it is legitimate and meets Department precedent (id.).

3. Analysis and Findings

The Department must determine whether the claims against the Company reflect an appropriate representation of recurring expenses and whether the claims against the Company that were paid out during the test year, and specifically the claim at issue, are prudent and therefore should be included in the cost of service.

The Department allows recurring expenses to be included in the cost of service. D.P.U. 1270/1414, at 33. The Company asserts that the use of a five-year average provides for a representative level of recurring expenses. The Department has previously found that the use of a five-year average appropriately accounts for varying levels of activity over such a period. D.P.U. 92-78, at 42-43. Accordingly, the Department finds the Company's use of a five-year average appropriate.

However, the Department may investigate specific claims. The Company is not correct in assuming that because its insurer made a significant contribution toward the claim against MECo, that the Company's actions were prudent. A company is expected to exercise prudent management in evaluating its position in legal actions and making appropriate determinations as to the resolution of any litigation against the Company. See D.P.U. 88-67, at 102; Boston Gas Company, D.P.U. 1100, at 84-86 (1982). The Attorney General argues that the Company's actions with respect to the claim at issue were not prudent. The Company has not demonstrated that its actions regarding this claim were prudent. Accordingly, the Department denies the inclusion of this claim in its calculation of cost of service. Therefore, the five-year average of actual claims paid, excluding the claim at issue, is $1,049,000, and the uninsured claims adjustment is $5,694,000.

C. Charitable Donations

1. The Company's Proposal

During the test year MECo booked $783,000 in charitable contributions (Exh. MECo 3, at 32). The Company proposed to reduce this amount by $665,000 and include in cost of service the remaining balance of $118,000, representing matching gifts from the Company to its employees who donate money to hospitals, cultural, and educational institutions (id.). The Company considered its matching gifts program to be an employee benefit necessary to attract and retain qualified personnel (id.).

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that $118,000 associated with MECo's matching gift program, should be removed from the cost of service (Attorney General Brief at 49). The Attorney General contends that the Company failed to explain or elaborate how these contributions benefit ratepayers (Attorney General Reply Brief at 16, citing D.P.U. 92-78, at 38-39).

b. Company

MECo argues that its matching gift program qualifies for inclusion in cost of service (Company Brief at 58). The Company maintains that because its matching gift programs provide an important fringe benefit to its employees, its matching gift program meets the Department's requirement for inclusion in cost of service (Company Reply Brief at 19, citing D.P.U. 92-78, at 38-39 (1992)).

3. Analysis and Finding

The Department excludes charitable contributions from the cost of service absent evidence that such giving is reasonable and provides a direct benefit to ratepayers. Commonwealth Electric Company, D.P.U. 88-135/151, at 45 (1989); D.P.U. 88-67, at 118-127. The Supreme Judicial Court has found that employee matching funds programs that benefit ratepayers directly may be considered a reasonable employee benefit. Boston Gas Company v. Department of Public Utilities, 405 Mass. 115, 123-124 (1989). The Department has stated that it may be possible that employee matching contributions may attract qualified employees, which in turn benefits ratepayers. D.P.U. 92-78, at 38.

The Department has found that contributions from employee matching funds may be allowed in cost of service as an employee benefit if there is some clear benefit to ratepayers. D.P.U. 92-210, at 48. To meet this standard, the Company must first establish that the employee matching funds program is a reasonable employee benefit. Id. Then, the Company must establish that a relation exists between the employee matching contributions program and customer benefits. Id. at 48-49.

In D.P.U. 92-78, at 38-39, the Department permitted MECo to include its employee matching funds in cost of service, but noted that future inclusion of this item in cost of service would be conditioned on a showing that substantiates the relationship between matching employee contributions and ratepayers benefits. The Department stated that a mere claim that matching programs are fringe benefits that promote employee goodwill, by itself, will not be sufficient to demonstrate a direct benefit to ratepayers. Id. at 39. In this proceeding the Company has failed to present evidence or explain how the matching contribution program provides direct benefits to ratepayers.

Therefore, the Company has not demonstrated in any tangible manner the relationship between employee matching contributions as an employee benefit and ratepayer benefits. Accordingly, the Department shall reduce the Company's cost of service by $118,000.

D. Postretirement Benefits other than Pensions Annual Expense

1. The Company's Proposal

The Company stated that in D.P.U. 92-78, the Department ordered a four-year phase-in into rates of the tax deductible contributions for postretirement benefits other than pensions ("PBOP") (Exh. MECo-3, at 11). The Company proposed to increase its test-year cost of service by $4,425,000 to recover its PBOP (Exh. MECo-3, exh. MFF-10, at 7, line 21). The Company stated that it calculated its PBOP expense in accordance with Statement of Financial Accounting Standards No. 106 ("FAS 106") (Exh. MECo-3, at 11).

The Company claimed that while the FAS 106 amount is $1,657,000 higher than the PBOP expense calculated on the tax deductible level, there is a net savings to ratepayers of $3,057,000 when this proposal is coupled with the Company's proposed treatment of the deferred PBOP costs (Exh. MECo-3, at 11-12; exh. MFF-10, at 7). The treatment of the deferred PBOP costs is discussed in Section III.E., below.

2. Positions of the Parties

a. The Attorney General

The Attorney General maintains that the medical cost trend rate used by the Company's actuary for the PBOP calculations grossly overstates the trends in medical costs expected by the market and by the Company's own health care experts (Attorney General Brief at 35). The Attorney General, noting an increase of $2,500,000 per year for each one percent change in the annual medical cost rate, states that small changes in the annual rate cause large changes in the total costs to be recognized (Attorney General Brief at 35, 39; Exh. AG-1-2, 1994 Annual Report at 17).

The Attorney General argues that the Company's actuary is assuming that the annual growth rate will be 8.5 percent during the years 1995 through 2004 and then 6.25 percent per year for subsequent years (Attorney General Brief at 35, citing Tr. 16, at 38-40; Exh. AG-1-2, 1994 Annual Report). The Attorney General maintains that the expected growth rate in health care costs for retirees for 1995 is less than one-half of the rate that the Company's actuary is using (Attorney General Brief at 35). The Attorney General refers to a Towers Perrin study which states that, "for retirees under 65, the average 1995 monthly costs reported by Towers Perrin's employee benefit information center members for retiree-only coverage is only three percent above the reported 1994 level," and the same study indicated that the reported rate of cost growth for Medicare-eligible retirees in 1995 hovering in a narrow range of about two percent to three percent (Attorney General Brief at 35-40, citing Exh. AG-1, at 6, 8). The Attorney General further quotes the Towers Perrin study which states that, "based on our experience helping employers manage their health plans, it appears highly unlikely that employers will let down their guard" (id. at 36, citing Exh. AG-1, at 2).

The Attorney General claims that a comparison of the actuary's projections of health care cost growth rates used in the Company's PBOP analysis with the actual rates indicates just how unrealistic the projections have been (Attorney General Brief at 37-38). The Attorney General states that for 1993 the medical trend rate was forecasted at 12.0 percent while the actual rate was 11.34 percent; for 1994 the forecasted rate was 11.00 percent while the actual rate was a minus 3.4 percent; and for 1995 the forecasted rate was 8.5 percent while the actual rate is currently estimated at approximately 3.51 percent (Attorney General Brief at 37-38, citing Exhs. DPU-5-18; MECo-3, exh. MFF-10 and 11). The Attorney General also asserts that the Company's forecasted medical cost increases are twice the general rate of inflation (Attorney General Brief at 40).

The Attorney General argues that the Department should require the Company to use realistic estimates of medical cost trends to determine the PBOP costs (Attorney General Brief at 40). The Attorney General maintains that recalculation of the proposed PBOP adjustment using a 3.5 percent medical inflation rate for all years of the study would change the proposed PBOP adjustment from a positive $4,425,000 to a negative $4,447,000, resulting in a total decrease of $8,872,000 to the proposed PBOP expense (Attorney General Brief at 40, citing Exh. MECo-3, exh. MFF-10, at 7; RR-AG-47).

b. The Company

The Company maintains that the adjustment for FAS 106 reflects the fact that many of the steps taken by the Company to offset the trend in medical costs are one-time events that mitigate the short term increase in health care costs but will be unavailable to produce further savings in the long run (Company Brief at 51). The Company states that copayments can only be increased so much before the health care benefit is effectively withdrawn, noting that the savings from increases in employee copayments, the reduced employment levels from restructuring, and employees switching to enhanced HMOs from BC/BS are realized only once (Company Reply Brief at 14). The Company contends that the one year snapshot survey by Towers Perrin provides no support for the Attorney General's adjustment (Company Brief at 51-52).[15] The Company maintains that at some point the underlying health care cost trend reemerges, and must be reflected in the FAS 106 calculation (Company Reply Brief at 14).

The Company asserts that gradually the effects of the offsets will be diminished and that the underlying escalation in health care costs is reasonably reflected in the actuarial analysis (Company Brief at 51). The Company argues that the Department should adopt the FAS 106 adjustment as shown on Exhibit MECo-3, exhibit MFF-10, at 7 (Company Brief at 52).

3. Analysis and Findings

Many of the concerns regarding PBOP health care costs expressed by the Department in D.P.U. 92-78 still exist. Several potentially volatile factors, including the inflation, discount and investment rates, medical cost predictions, medical trend assumptions, changes in the methods of providing health care and technological advances still give rise to enormous uncertainties regarding the future level of the Company's PBOP obligation. As the Attorney General notes, a one percent change in the medical inflation rate can affect the calculation of the annual level of PBOP expense by millions of dollars. The Attorney General points out that the medical inflation rate for 1994 was considerably less than the estimate in the actuarial study, and projections for 1995 indicate that inflation is well below that shown in the study. The Department is concerned

[15] The Attorney General moved to strike, as unresponsive, a letter from the Company's consultant attached to the response to RR-AG-47. The response contained information beyond the scope of the request, and Attorney General's motion is granted. The Department notes that the Company did not, on brief, rely on those portions of the responses.

about the medical inflation rates, interest rates, and other variables contained in the actuarial studies. Also, as the Department has previously noted, while a non-regulated company has an incentive to reflect as small an expense as possible for PBOP costs, the reverse is true for a regulated company. D.P.U. 92-78, at 82.

However, the Department finds that there is insufficient evidence to justify changing the long-term medical inflation rates used in the actuarial studies. Nevertheless, given the uncertainties that still exist, the Department finds that it is still inappropriate to impose the full cost of FAS 106 on MECo's current ratepayers. The Department finds that funding the tax-deductible amount is consistent with Department precedent and strikes the best balance in allocating PBOP expenses appropriately between current and future ratepayers and between ratepayers and shareholders. D.P.U. 92-78, at 83. Therefore, the Department will include $12,177,000 for PBOP expense in rates and decrease the proposed cost of service by $1,657,000 (Exh. MECo-3, exh. MFF-10, at 7, section 2).

E. Amortization of Deferred PBOP Expenses

1. The Company's Proposal

The Company proposed to recover only the amount by which its FAS 106 costs exceeded its rate recovery with the permitted return over a period of five years (Exh. MECo-3, at 11, 14). The Company stated that between October 1, 1992 and September 30, 1994, MECo incurred FAS 106 expenses of $30,490,000,[16] while collecting only $16,151,000 from customers for a deficiency, based on the full FAS 106 level, of $14,339,000 (Exhs. MECo-3, at 14; II-1-29, at 4). In addition, MECo estimated that it will incur an additional deficiency of $2,756,000 prior to the

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16 $14,439,000 + $16,051,000 = $30,490,000 (Exh. II-1-29, at 3, ln. 15)

adoption of rates resulting from this proceeding (Exh. MECo-3, at 14). The Company has calculated a return of $4,697,000 on the unrecovered amount as of October 1, 1995 (Exh. II-1-29, at 4). The total recoverable amount on October 1, 1995 claimed by MECO is thus $21,792,000.[17] The Company has calculated a return of $8,726,000 on the recoverable balance over the five-year recovery period (Exhs, MECo-3, at 14; II-1-29, at 6). Therefore, the total amount the Company seeks to recover is $30,518,000 over five years.[18] This results in a proposed annual amortization of $6,104,000 (Exh. MECo-3, at 14, exh. MFF-10, at 7).

The Company also included a calculation of an annual amortization based on the excess of the tax deductible contributions over the amount recovered in rates (Exh. MECo-3, exh. MFF-10, at 7, section 3). After adding carrying charges and using the same five-year amortization period, the Company's calculations indicate an annual amortization of $10,818,000 (Exh. MECo-3, exh. MFF-10, at 7, section 3).

By recovering the amount that its FAS 106 expenses exceeded its rate recovery, rather than the full amount that the cumulative tax deductible amounts exceeded the rate recovery, the Company claimed that there is a $4,714,000 reduction to the cost of service (Exh. MECo-3, at 12, exh. MFF-10, at 7). MECo stated that it will recover the remaining deficiency as its cumulative FAS 106 expense increases relative to the cumulative tax deductible amounts over time (Exh. MECo-3, at 12).

2. Positions of the Parties

a. The Attorney General

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[17] $14,339,000 + $2,756,000 + $4,697,000 = $21,792,000 (Exh. II-1-29, at 4)

[18] $21,792,000 + $8,726,000 = $30,518,000

The Attorney General maintains that because the proposed annual PBOP expense is overstated, the amortization of deferred PBOP expense is overstated (Attorney General Brief at 40-41). The Attorney General argues that a recalculation of the amortization using a 3.5 percent medical trend rate would reduce the annual amortization from $6,104,000 to $4,803,000 on a FAS 106 basis (Attorney General Brief at 41, citing Exh. MECo-3, exh. MFF-10, at 7; RR-AG-47). Therefore, the Attorney General argues that the cost of service should be reduced by $1,301,000 (Attorney General Brief at 41)

b. The Company

The Company makes the same arguments concerning the amortization of deferred PBOP costs as it makes for the annual PBOP expense in Section D, above (Company Brief at 50-52). The Company maintains that the Department should adopt the amortization of deferred PBOP expense as shown under the FAS 106 column on Exhibit MECo-3, exhibit MFF-10, at 7 (Company Brief at 50-52).

3. Analysis and Findings

Previously, the Department found that a four-year phase-in of the full tax deductible amount was appropriate. D.P.U. 92-78, at 83. The Department also stated that the "Company may defer the difference between the amount recovered in rates and the tax deductible amount it actually funds, plus carrying costs based on the allowed rate of return in this case, for consideration in its next rate case." D.P.U. 92-78, at 84. The Department finds that consistent with its Order in D.P.U. 92-78 and its findings concerning the appropriate basis for the determination of annual PBOP expense, the tax deductible basis is the appropriate basis to use in amortizing the deferred PBOP costs.

In reviewing the Company's supporting calculations for the tax deductible basis, the Company has included in the deferred amount a payment of $18,055,001 made in December 1992 and included carrying charges on this amount (Exh. II-1-29, Att. 4, at 7). This payment predates the adoption of FAS 106 by the Company on January 1, 1993, and is equivalent to a full year of PBOP expense under the FAS 106 methodology (Exh. DPU-5-4, Att. at 6).

While the Department addressed the phase-in of the annual tax deductible amounts upon the adoption of FAS 106 in D.P.U. 92-78, the Department did not address the early payment which the Company subsequently made in December 1992. The Department finds that this payment benefits ratepayers because it will generate earnings which will become a funding source. However, in the past, the Department has denied carrying charges on such prepayments. D.P.U. 93-60, at 61-64. The Department finds that allowing a five-year amortization of this payment, but denying carrying charges produces an equitable sharing of the burden between ratepayers and shareholders. The Department will amortize $18,055,001 over five years for an annual amortization amount of $3,611,000. Therefore, the Department will exclude the $18,055,001 payment in December 1992 from the calculation of carrying charges on the deferred amount as shown in Exhibit II-1-29, Attachment 4. Based on the five-year amortization, this will produce an annual amortization of $3,350,000 on the remaining deferred charges.[19] Therefore, the total allowed amortization is $6,961,000.[20] This will result in an increase of $857,000 to the

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19 Carrying charges from October 1995 are based on the rate of return allowed in this case.

20 $3,350,000 + $3,611,000 = $6,961,000

proposed amortization of PBOP expense.[21]

F. Pensions

1. The Company's Proposal

During the test year the Company recorded $4,950,000 in pension expense based on Financial Accounting Standard 87 ("FAS 87").[22] The Company proposed to base pension expense on the actual tax deductible contributions made during the plans' latest fiscal year end, March 31, 1995, or $10,692,000 (Exh. MECo-3, at 19, exh. MFF-10, at 8).[23] This results in a proposed increase of $5,742,000 to the cost of service (Exh. MECo-3, at 20). The Company maintained that the Department has consistently favored including in the cost of service only the tax deductible contributions made to pension plans (Exh. MECo-3, at 18-19).

In the alternative, should the Department choose to allow the recovery of pension expense as calculated in accordance with FAS 87, the Company stated that there would be a $5,343,000 decrease to the proposed adjustment (Exh. MECo-3, at 20).

2. Analysis and Findings

The Department previously has allowed pension expense calculated based on FAS 87. D.P.U. 92-78, at 44-46. In D.P.U. 92-78, the Department stated that it did not endorse any specific method for calculation of pension expense, and that the intricacies of this issue warrant an investigation on a case-by-case basis. Id. at 46. In the present case, the Company proposed to

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21 $6,961,000 - $6,104,000 = $857,000

22 $2,871,000 + $2,079,000 = $4,950,000 Exh. MECo-3, exh. MFF-10, p. 8, ln. 28 and 39, Test Year Per Books

23 $7,114,000 + $3,578,000 = $10,692,000 (Exh. MECo-3, exh. MFF-10, at 8, Estimated Rate Year Cash Basis, ln. 28 and 39).

calculate pension expense based on the actual tax deductible contributions made during the plan's latest fiscal year ended March 31, 1995. The record indicates that the Company has been making annual contributions to its pension plans since at least 1990 (Exh. DPU-5-10R, Att.). The amount included in the proposed cost of service, $10,692,000, is considerably higher than contributions have been in recent years, and is more than double the 1993 amount of $4,862,643 (id.). The Company attributes this increase to a change in interest rate assumption levels (Tr. 8, at 175-178).

The actuarial figures, based on the fiscal year ending March 31, 1995, do not provide a reliable forecast of future funding level requirements. Because the volatility of interest rates significantly affects the contribution levels, the Department will determine a representative level of pension expense. The Department will base pension expense on a five-year average of the cash contributions for the fiscal year ended March 31, 1995 and the calendar years 1990 through 1993, inclusive.[24] Therefore, the Department will allow $5,259,000 as a representative level of pension expense.[25] This will result in a decrease of $5,433,000 to the proposed pension expense. However, the Department again does not endorse any specific method as appropriate for future proceedings, but instead will continue to investigate this issue on a case-by-case basis.

G. Unfunded Deferred Income Taxes

1. Unfunded Deferred Federal Income Taxes

a. The Company Proposal

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24 Because there is a six month overlap between the test year and the fiscal year ended March 31, 1995 and a three month overlap between the test year and calendar year 1993, the Department will not include the test year amount in the calculation.

25 $10,692,000 + $4,862,643 + $3,947,635 + $4,029,421 + $2,762,400 = $26,294,099; $26,294,099/5 = $5,258,820 (Exhs. MECo-3, exh. MFF-10, at 8, DPU-5-10R, Att., Pension Expense-Contributions Basis).

The Company claimed that it has unfunded property-related deferred federal income taxes of $2,925,000 and unfunded non-property-related deferred federal income taxes of $1,695,000 for a total of $4,620,000 (Exh. MECo-3, workpaper MFF-26, at 1). The Company claimed that the unfunded balance was caused primarily by a change in the federal income tax rate from 34 percent to 35 percent (Exh. MECo-3, at 40). MECo proposed to amortize the unfunded total over 10 years resulting in a proposed annual amortization of $462,000 (Exh. MECo-3, workpaper MFF-26, at 1).

b. Positions of the Parties

i. The Attorney General

The Attorney General notes that the Company returned to ratepayers the excess deferred federal income taxes that resulted from the Tax Reform Act of 1986 decrease in the corporate income tax rate to 34 percent (Attorney General Brief at 55, citing Tr. 14, at 91-93). The Attorney General maintains that when the return period ended in July 1990, the Company's accumulated deferred federal income taxes should have been sufficient to cover the existing liability (Attorney General Brief at 55, citing Tr. 14, at 91-93).

The Attorney General states that the 1993 increase in the corporate tax rate from 34 percent to 35 percent created a deficiency in the Company's accumulated deferred federal income tax reserves (Attorney General Brief at 55, citing Exh. MECo-3, at 40). The Attorney General claims that using the $26,024,000 theoretical balance of deferred tax assets on the books at December 31, 1994 as a conservatively high proxy for the 1992 year end amount, the total deficiency should be no more than 1/34th of that balance or $765,412 (id. at 56, citing Exh. MECo-3, workpaper MFF-26, at 1). The Attorney General argues that the Department should reduce the unfunded amount by $749,588 ($1,515,000 - $765,412) (id. at 56). The Attorney General states that the Department should require the Company to provide full support for that amount in its next rate case (id.).

The Attorney General claims that the Company states on brief that it made a mistake and included non-property related deferred income tax reserves in the property related reserve account (Attorney General Reply Brief at 17, citing Company Brief at 63-65; Exh. MECO-3, workpaper MFF-26, lines 25 and 33). The Attorney General argues that the Company attempts to insert evidence on brief (id. at 17). The Attorney General maintains that the Department should order the Company to provide explanations in its next rate case for changes and corrections that it is attempting to make on brief (id. at 17 n.6).

ii. The Company

The Company maintains that pursuant to D.P.U. 87-21 and D.P.U. 89-194/195, MECo returned a total of $2,818,630 in excess deferred taxes to customers between July 1987 and March 1991 (Company Brief at 63). MECo states that this amount included $5,083,000 of plant-related assets offset by $2,265,000 of non-property excess net deferred tax assets on the Company's books (id., citing Exh. C/S, at 17 of the Company's compliance filing in D.P.U. 89-194/195).

The Company claims that the Attorney General's calculation is incorrect because it fails to include in the "unfunded" calculation the amount of non-property excess deferred taxes already collected from customers in previous rate filings (id. at 63-64). MECo maintains that the non-property excess net deferred tax assets of $2,265,000 was collected from customers and is included on line 25 of the property-related section of the "unfunded" calculation in

Exhibit MECo-3, workpaper MFF-26, at 1 (id. at 64, referring to Att. 2, at 19a). The Company argues that it has proven the reasonableness of its unfunded deferred tax calculation (id. at 64).

c. Analysis and Findings

Circumstances other than the change in tax rates have affected the unfunded deferred tax calculations. For example, the record indicates that an IRS audit adjustment has been included in several accounts (RR-AG-55). The nature and propriety of this adjustment and the extent to which other items in the deferred tax calculation may have been affected by this adjustment were not addressed by the Company. The Company indicates on brief that the calculation of the property related and non-property related deficiencies have been commingled.

The Company presents arguments on brief that substantially change the calculations (Company Brief at 64). The Department finds that the Company has not adequately supported or explained the claimed deficiency in its deferred federal income tax reserves, for both its property-related and non-property related expense. Therefore, the Department denies the Company's proposed adjustment of $462,000 and directs the Company to resubmit its proposal in the next appropriate proceeding, accurately computing the property and non-property related components and explaining the reasons for the deficiency.

2. Unfunded Deferred State Income Taxes

a. The Company's Proposal

The Company claimed that it has unfunded property-related deferred state income taxes of $9,164,000 (Exh. MECo-3, workpaper MFF-26, at 2).[26] The Company claimed that the unfunded

[26] The Company originally proposed $9,176,000. In response to an argument by the Attorney General, MECo withdrew a proposed adjustment of $12,000 for unfunded non-property related deferred state income taxes (MECo Brief at 65).

balance represents the cumulative impact of previously unrecorded deferred state taxes (Exh. MECo-3, at 40). MECo proposed to amortize the unfunded total over 10 years, resulting in a proposed annual amortization of $916,000 (Exh. MECo-3, at 40-41).

b. Positions of the Parties

i. The Attorney General

The Attorney General maintains that the ten-year amortization period was chosen arbitrarily by the Company, and is not based on the actual lives of the assets that gave rise to the deferred taxes, law or precedent (Attorney General Brief at 56; Attorney General Reply Brief at 18). The Attorney General claims that in Western Massachusetts Electric Company, D.P.U. 86-280-A at 65 (1987), the Department determined that excess deferred income taxes should be returned over the average remaining life of the assets that gave rise to those deferred income taxes (Attorney General Brief at 57). The Attorney General argues that because the Company does not have the vintage account data for specific deferred taxes associated with specific assets, it does not know the remaining life of the pre-1980 assets (Attorney General Reply Brief at 18). Therefore, the Attorney General maintains, the Company must use the South Georgia[27] method which spreads recovery over 20 years, the average remaining life of the whole group of assets (id. at 18, citing Exh. DPU-6-18). The Attorney General states that the Department should include an annual expense of $458,000 ($9,164,000/20) (Attorney General Brief at 57, citing Exh. MECo-3, workpaper MFF-29, at 2).

ii. The Company

MECo states that it agrees with the Attorney General in principle, but not with the

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27 See D.P.U. 92-111, at 170-173.

adjustment (Company Brief at 65). The Company maintains that the deferred taxes at issue were generated prior to 1980 and thus at least 15 years of the useful lives of the assets that gave rise to the deferred taxes has elapsed (id. at 65, citing Exh. DPU-6-18). The Company contends that the average remaining life of the assets on the books today is 20 years and the average remaining life of the assets installed prior to 1980 is substantially less (id. at 65). Therefore, MECo argues that the Attorney General's adjustment should be rejected (id.).

c. Analysis and Findings

Because of the concerns regarding the proposed deficiency in deferred federal income taxes, the Department finds that the Company should also review its determination of the deficiency in deferred state income taxes. The Department recognizes that the Company has some level of unfunded deferred state income taxes, and therefore will include amortization of the proposed amount of $9,164,000 over 20 years resulting in an annual amortization of $458,000. This will decrease the proposed amortization by $458,000. The Company is directed to review its calculations and to resubmit the proposed deficiency in the next appropriate proceeding.

H. NEPSCo Servicing Expense.

1. The Company's Proposal

NEPSCo services provided to the Company are divided into four categories: (1) construction; (2) engineering; (3) servicing; and (4) reimbursement billing (Exh. AG-3-32). The Company booked $47,105,415 of test year NEPSCo servicing charges with $47,100,329 being expensed and $5,087 being capitalized (id.). The Company characterized these servicing charges as primarily administrative and general (Tr. 12, at 47).

2. Positions of the Parties

a. The Attorney General

The Attorney General contends that a review of the types of activities included in the servicing category reveals that many activities are in the nature of support services for plant and construction activities but that the servicing charges are essentially all expensed because only $5,087 out of $47,105,415 were capitalized (Attorney General Brief at 41-43). He further contends that, since the bulk of the activities in the servicing group are overheads, the Company should capitalize the servicing overhead costs that are charged by NEPSCo at a rate reflecting MECo's overall rate of capitalized costs so that those servicing overhead costs can also be allocated over the useful lives of the assets (id. at 42).

The Attorney General contends that a reasonable basis for charging the NEPSCo servicing costs to capital would be the rate for which the total amount of labor costs are capitalized (id.). The Attorney General maintains that since 29.35 percent of MECo's labor costs were capitalized during the test year, a total of $13,825,439 should be charged to plant accounts rather than being expensed ($47,105,415 x 0.2935) (id.). The Company capitalized $5,087 of servicing costs during the test year; therefore, the Attorney General recommends that the cost of service and the revenue requirement be reduced by $13,820,352 ($13,825,439 - $5,087) (id. at 43).

b. The Company

The Company asserts that the adjustment proposed by the Attorney General is totally unsupported by the record (Company Brief, at 53). The Company maintains that the record does not indicate that these costs were inappropriately expensed and that the Attorney General's proposal for the percentage of labor costs capitalized would not be an appropriate method for allocating these costs (id.).

MECo contends that under established accounting standards, the servicing items must be reflected currently on the Company's income statement and not capitalized (id. at 54). The Company states that pursuant to FERC's Plant Instruction on overhead construction costs, overheads must be "charged to particular jobs or units on the basis of the amounts of such overheads reasonably applicable" to the job .... The addition to direct construction costs of arbitrary percentages or amounts to cover assumed overhead costs is not permitted." (id., citing 18 C.F.R. Part 101,Ch. 1, Electric Plant Instructions). Therefore the Company maintains that the Attorney General's attempt to capitalize these expenses based on an "arbitrary" percentage to cover "assumed overhead costs" is not permitted by FERC accounting rules (id. at 55).

3. Analysis and Findings

The Department has adopted the FERC Uniform System of Accounts, Part 101 and the accompanying definitions, as published in 18 C.F.R. Part 101, revised as of April 1, 1981, with certain modifications (220 C.M.R. § 51.00 Uniform System of Accounts for Electric Companies). The standard to decide the issue is provided in 18 C.F.R. Part 101, Chapter 1, Electric Plant Instructions, Overhead Construction Costs which states that overheads:

> shall be charged to particular jobs or units on the basis of the amounts of such overheads reasonably applicable thereto .... As far as practicable, the determination of payroll charges includible in construction overheads shall be based on time card distributions thereof. Where this procedure is impractical, special studies shall be made periodically of the time of supervisory employees devoted to construction activities to the end that only such overhead costs as have a definite relation to construction shall be capitalized. The addition to direct construction costs of arbitrary percentages or amounts to cover assumed overhead costs is not permitted.

The record shows that NEPSCo servicing costs expensed by MECo in the test year are administrative and general in nature (Exh. MECo-3, workpapers MFF-31, MFF-32, at 4). Since these costs do not have a clear and definite relation to construction, the Department finds that the Company capitalized the proper level of NEPSCo servicing charges in the test year. Therefore, the Department rejects the proposal by the Attorney General that 29.35 percent of the NEPSCo servicing charges should be capitalized. Accordingly, the Department finds that no adjustment is required to the test year treatment of NEPSCo servicing costs.

I. Uncollectible Expense

1. The Company's Proposal

During the test year, the Company booked \$12,968,000 in uncollectible expense (Exh. MECo-3, exh. MFF-1, at 10). The Company calculated its uncollectible expense by (1) determining the three-year weighted average of net write-offs as a percentage of retail electric operating revenues for the corresponding period, and (2) multiplying the resulting percentage by the proposed total cost of service (Exh. MECo-3, at 21; Company Brief, Att. 2, at 10). The Company calculated a test-year uncollectible ratio of 0.793 percent (Exh. MECo-3, exh. MFF-10, at 10). MECo applied this ratio to the requested cost of service of \$1,488,228,000, resulting in an expense of \$11,802,000 (Company Brief, Att. 2, at 10).[28] Therefore, the Company proposed to adjust its test year cost of service downwards by \$1,166,000 (id.).[29]

2. Positions of the Parties

a. Ms. Walton

Ms. Walton argues that the Company could be more diligent in its collection efforts and

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28 This includes demand side revenue of \$46,339,000 (Exh. MECo-3, exh. MFF-10, at 10)

29 \$11,802,000 - \$12,968,000 = (\$1,166,000)

that MECo is therefore responsible for the increase in its net write-offs (Walton Brief at 5). Ms. Walton points out that the Company recovered approximately $1 million in 1993 by matching social security numbers of current customers to old unpaid accounts, but did not continue the effort after 1993 (id. citing Exh. AG-17-10). Accordingly, Ms. Walton recommends that the Department shift half the uncollectible expense to the Company's shareholders (id.). No other party addressed this issue.

3. Analysis and Findings

The Department permits companies to include for ratemaking purposes a representative level of uncollectible revenues as an expense in cost of service. Commonwealth Gas Company, D.P.U. 87-122 (1987). To determine the amount of any adjustment for uncollectibles, a company performs a calculation that includes determining the average of the most recent consecutive three years' net write-offs, as a percentage of adjusted test year revenues, i.e., the uncollectible ratio. Berkshire Gas Company, D.P.U. 90-121, at 96-97 (1990); Western Massachusetts Electric Company, D.P.U. 84-25, at 113-114 (1984). The Company calculated an uncollectible ratio of 0.793 percent by using net write-offs as a percentage of revenues for the years ending September 1992, 1993, and 1994 (Exh. MECo-3, at 21). The Department has found that the use of the most recent three years of data available is appropriate. D.P.U. 89-114/90-331/91-80, at 138-139. The method used by the Company for calculating the uncollectible adjustment ratio is consistent with Department precedent (id.). The Department finds that the total cost of service established in this proceeding is $1,417,757,000,[30] and the uncollectible expense is $11,610,000.

30 This does not include demand side management revenue of $46,339,000 (Exh. MECo-3, exh. MFF-1, at 10).

Accordingly, the Department finds that the uncollectible expense adjustment to the cost of service is negative $1,358,000.[31]

With respect to whether the Company could have been more diligent in its collections efforts, the Department has clearly stated that an increasing level of uncollectible expense over past rate cases warrants further inquiry. See Boston Edison Company, D.P.U. 85-266-A/85-271-A at 81 (1985). While the Company's level of uncollectible expense has increased over the past several years, the record demonstrates that the Company has in place appropriate write-off and collection policies (Exh. MECo-3, at 22). The Department will review the Company's collection activities further in the next appropriate proceeding.

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[31] $11,610,000 - $12,968,000 = ($1,358,000)

J. Rate Case Expense

1. The Company's Proposal

The Company incurred $340,000 in rate case expenses for the current proceeding (RR-DPU-22). Of this amount, $185,000 represents incremental costs over the $155,000 in rate case expense incurred during the test year (id.; RR-DPU-31). The Company proposed to normalize the incremental costs over two years, the average interval between the Company's last four rate cases (Exh. MECo-3, at 27). Therefore, the Company proposes an increase in test year expense of $93,000 (RR-DPU-22; Company Brief, Att.2, at 10).

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Company is proposing to recover both incremental costs, which are not contested, and costs charged by NEPSCo for the salaries of Company attorneys, witnesses and support staff, which are recoverable whether the Company filed a rate case or did not (Attorney General Brief at 51). The Attorney General maintains that these costs charged by NEPSCo do not cause the NEES system to incur any incremental cash outlays and thus should not be included in rate case expense (id.). Furthermore, the Attorney General asserts that the salaries of NEPSCo employees working on the rate case were already charged to MECo during the test year, resulting in MECo recovering twice for these costs (id. at 52). Therefore, the Attorney General argues that the Department should deny recovery of any NEPSCo charges in rate case expense (id. at 52-53).

In addition, the Attorney General contends that the average time interval over the last four rate cases was two years (id. at 53). The Attorney General states that the Company incorrectly calculated the average time interval by including the Company's interim rate decrease associated with the settlement in D.P.U. 93-194 which artificially decreased the average period in between rate cases to 1.4 years (id.). Because the Attorney General contends that the Company's filing in D.P.U.93-194 was not a rate case, he reasons that MECo should not be allowed to include that case in the determination of the average interval (id.). However, the Attorney General acknowledges that since the Company rounded the average up to two years and used a full two-year normalization period for the costs, the Company's cost of service does not have to be adjusted for the normalization period (id.).

b. The Company

The Company contends that the Attorney General does not understand the NEPSCo charges (id. at 60). The Company states that it specifically tracks the expenses related only to the rate filing (id.). In addition, the Company noted that in D.P.U. 92-78, the Department found that "MECo is specifically billed for services provided by NEPSCo" (id. at 60-61, citing D.P.U. 92-78, at 57). Therefore, the Company contends that NEPSCo's billings to MECo are properly included as part of the rate case expense calculation (id. at 60-61).

3. Analysis and Findings

The Department's practice in determining the amount of regulatory litigation expense to include in rates is to normalize these costs so that a representative annual amount is included in the cost of service. D.P.U. 93-60, at 143; D.P.U. 91-106/138, at 19-20; Berkshire Gas Company, D.P.U. 1490, at 33-34. In order to determine whether the Company has correctly calculated its rate case expense, the Department must determine whether the Company: (1) has correctly calculated the normalization period over which reasonable rate case expense would be distributed;

and (2) is allowed to recover costs paid to its service company, NEPSCo, for services associated with the current rate case.

First, with regard to the normalization period, the Department determines the appropriate period for rate case expenses by taking the average intervals between filing dates of a company's last four rate cases (including the present one), rounded to the nearest whole year. D.P.U. 91-106/138, at 19-20. The Department finds that the Company used a correct average time interval even though the Company incorrectly included the interim rate decrease associated with the settlement in D.P.U. 93-194.[32]

Second, regarding the NEPSCo costs, the Department has considered and rejected a similar argument by the Attorney General. D.P.U. 92-78, at 58. In the instant case, the Attorney General has failed to demonstrate that the Company would recover the NEPSCo expenditures twice.

The Company determined an incremental amount of rate case expense above the test-year expense, and normalized that amount over two years. That is not consistent with Department precedent. The proper method is first to determine the rate case expense, normalize that expense over an appropriate period of time, and then compare it to the test-year level to determine the adjustment. See Barnstable Water Company, D.P.U. 93-223-B at 14-17 (1994). The Department notes that the annual rate case expense to be included in rates is $340,000 over two years which produces an annual expense of $170,000 (RR-DPU-22). Therefore, MECo's rate case expense adjustment shall be $15,000.[33] Accordingly, this results in a $78,000 decrease to the cost of

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[32] Because the Company rounded the average interval from 1.4 years to two years, this results in no change to the normalization period.

service.[34]

In D.P.U. 92-78, at 58, the Department directed the Company in its next rate case to file a proposal for handling rate case expense that reflects the Department's goals of "minimizing litigation and containing costs." Although MECo did not provide a specific proposal, the Department notes that the Company's rate case expense is considerably lower than in its last rate case (Exhs. AG-3-14; DPU-RR-22). The Department encourages the Company to continue its efforts to minimize the rate case expense.

K. Renovation Expense

1. The Company's Proposal

The Company booked $700,000 of test year expense to Account 588.63 (Distribution Building Expenses) associated with the renovation of office space for the purpose of facilitating NEES' corporate reorganization (Exh. AG-5-58).

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Department's precedent regarding the recovery of costs is well established and that the renovation cost is non-recurring and non-extraordinary (Attorney General Brief at 50-51, citing D.P.U. 1270/1414, at 32-33). Therefore, according to the Attorney General, the Department should eliminate the renovation costs from the cost of service and reduce the Company's revenue requirement by $700,000, or alternatively amortize the costs over five years (id.).

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33 ($340,000/2) - $155,000 = $15,000

34 $15,000 - $93,000 = ($78,000)

b. The Company

The Company agrees with the Attorney General that a five-year amortization of this expense is consistent with the amortization period in the Settlement in D.P.U. 93-194, and to other costs incurred by the Company in connection with the corporate reorganization (Company Brief at 59). In order to amortize the renovation costs the Company contends that the cost of service should be reduced by $560,000 (id.).

3. Analysis and Findings

There are three classes of expense which the Department considers recoverable through rates: (1) annually recurring expenses; (2) periodically recurring expenses; and (3) extraordinary non-recurring expenses. D.P.U. 92-250, at 102; D.P.U. 89-114/90-331/91-80, at 152; D.P.U. 1270/1414, at 32-33. The record does not contain evidence to support the treatment of this charge as either an annually recurring expense or a periodically recurring expense. Non-recurring expenses incurred in the test year are ineligible for inclusion in the cost of service unless the company demonstrates that they are so extraordinary in nature and amount as to warrant their collection by amortizing them over an appropriate time period. Id. Based on the amount in question, the Department finds that the overall impact on the Company's finances of this renovation expense is not extraordinary. Accordingly, the Department directs that the Company's cost of service, as filed, shall be reduced by a total of $700,000.

L. NEES Software Expense

1. The Company's Proposal

During the test year, the Company booked $16,100,000 in information system expenses, of which $3,572,726 represented the amortization of the NEES Information Strategy ("NIS"), a multi-year upgrade of NEES' information systems (Exh. AG-5-42; RR-AG-52; Tr. 11, at 102). Of this amortization, $1,001,148 represented amortization on MECo's software leases, and the remaining balance was associated with the amortization of MECo's hardware leases (RR-AG-52; Tr. 11, at 112-113).

MECo is amortizing the NIS software over a period of five years, in a manner it considers to be consistent with federal accounting regulations (RR-AG-51; Tr. 11, at 100). As support for this amortization period, the Company referred to FERC's "Biennial Report of Major Utility Compliance Audit Issues" (May 1992), which instructed FERC's Audit Division field staff that software amortization periods should not exceed five years (RR-AG-51).

2. Positions of the Parties

a. The Attorney General

The Attorney General contests the Company's proposed amortization period for its NIS-related software. According to the Attorney General, basic accounting principles require that the cost of this system be allocated over the period of time in which MECo will receive benefits from the system (Attorney General Brief at 43, referencing Financial Standards Accounting Board Statement of Concepts No. 6, ¶ 149; Accounting Principles Board Opinion No. 17, ¶ 28; Tr. 11, at 98; Attorney General Reply Brief at 14). The Attorney General disputes the probative value of the FERC accounting instructions, noting that the Department is neither bound by federal accounting findings nor is it required to apply federal standards in cases of Massachusetts jurisdiction (Attorney General Brief at 14, citing D.P.U. 94-50, at 333; op. cit. Louisiana Pub. Serv. Comm'n v. Federal Communications Comm'n, 100 S. Ct. 1890 (1986) and New England Telephone, D.P.U. 86-33-G at 269 n.27 (1987)).

The Attorney General reasons that because the software will benefit the Company for many years, the Company's proposed amortization period is unreasonable and will create a subsidy to future customers by present users of the system (Attorney General Brief at 44). Because the previous system had been in place for twenty years, the Attorney General proposes a twenty-year amortization of the NIS system, resulting in a reduction of $951,090 from the Company's proposed cost of service (id. at 45).

b. The Company

MECo argues that the Attorney General's recommendation on this issue is inconsistent with FERC's accounting guidelines, which specify a computer software amortization period not in excess of five years (Company Brief at 56, citing RR-AG-51). The Company also contends that the financing arrangement for the software is beneficial to customers and that the amortization period is longer than that approved recently for NYNEX in D.P.U. 94-50 (Company Brief at 56, citing D.P.U. 94-50, at 365; Company Reply Brief at 17). MECo states that its five-year amortization period is reasonable, given the rapid changes in computer systems today (Company Reply Brief at 17-18).

3. Analysis and Findings

As an initial matter, we note that neither federal accounting requirements nor general accounting standards preempt the Department's treatment of accounting issues for ratemaking purposes. D.P.U. 94-50, at 333, 435-436; D.P.U. 92-78, at 79; D.P.U. 85-270, at 118-119; Louisiana Pub. Serv. Comm'n v. Federal Communications Comm'n, 100 S. Ct. 1890 (1986). Accordingly, the Department shall evaluate the proposed amortization period on its own merits.

The Department has noted that technological improvements, particularly with respect to information systems, may render those systems obsolete after a short period of time. Boston Gas Company, D.P.U. 93-60-D at 4 (1994). Excessive amortization periods would tend to discourage utilities from innovations that serve to improve service to their customers. Id. At the same time, a utility's projects should remain in service for some years after inception and benefit future customers. Therefore, an unduly short amortization would be inappropriate because it would shift a disproportionate amount of the costs of these projects to current customers. Id. While the Company's previous information systems were in use for twenty years, the record evidence does not demonstrate that the NIS package can be expected to remain in service for a similar period of time. Furthermore, the evidence in this case suggests that the software amortization is related to the term of the lease agreements (Tr. 11, at 102-113). The five-year amortization period selected by MECo strikes an appropriate balance between the need to continue improvements in service technology and the need to maintain intergenerational equity. Accordingly, the Department shall not adjust the Company's test-year cost of service for this item.

M. Inflation Allowance

1. The Company's Proposal

The Company proposed an inflation adjustment increase of $2,923,000 (Exh. MECo-3, exh. MFF-1, at 13). MECo used the Gross Domestic Product Implicit Price Deflator ("GDPIPD") index in determining the increase from inflation for the period from the midpoint of the test year to the midpoint of the year following the implementation of new rates (March 1994 to March 1996) (id.). The Company stated that the increase equaled 5.44 percent (id.). According to the Company, it calculated the inflation adjustment by applying the projected GDPIPD to residual O&M expenses. In its brief, MECo submitted a revised schedule in which it proposed an adjustment of $2,710,000, to reflect the most recent inflation forecast of 5.04 percent and the Company's updated cost of service schedules (Company Brief, Att. 2, at 13). The Company asserts that it is making a continuing and effective effort to control costs (Company Brief at 8-9).

2. Analysis and Findings

The inflation allowance recognizes the fact that known inflationary pressures tend to affect a company's expenses in a manner that can be measured reasonably. The adjustment reflects the likely cost of providing the same level of service in the future as was provided in the test year. The Department permits utilities to increase their test-year residual O&M by the projected GDPIPD for the period from the midpoint of the test year to the midpoint of the rate year. D.P.U. 92-250, at 97; D.P.U. 92-78, at 60; D.P.U. 87-260, at 86. In order to allow an inflation adjustment, the Department has required utilities to demonstrate all cost containment measures they have implemented. D.P.U. 92-210, at 78. The Company stated that it has implemented effective and continuing cost-control measures. Accordingly, the Department finds the Company's recovery of an inflation allowance to be appropriate. As outlined on Table 1, applying the updated inflation factor of 5.04 percent to the residual O&M expense determined in this Order by the Department, results in an inflation allowance of $2,670,000.

IV. REVENUES

A. Revenue Adjustments

1. MBTA Transmission Service

a. Background

The Massachusetts Bay Transportation Authority ("MBTA") formerly received service from the Company at approximately 200 service locations (Exh. AG-17-15). In May of 1991, G.L. c. 161A, § 32 was enacted, which enabled the MBTA to purchase electricity through the wholesale market. The MBTA issued a Request for Proposals and negotiated a contract with Boston Edison Company ("BECo") (Exh. MECo-3, workpaper MFF-28, at 22-23). The MBTA notified the Company that it intended to terminate its sales agreements at 13 delivery points, and MECo proposed to offer a transmission service so that the MBTA could have its power purchases from BECo delivered to its facilities (Exh. AG-8-6). MECo continues to provide the MBTA with all-requirements service at 181 remaining locations (id.; Exh. AG-17-15).[35]

On March 3, 1995, the Federal Energy Regulatory Commission ("FERC") approved a settlement reached between the MBTA and MECo on a transmission contract ("Settlement") in ER94-129-000, which, inter alia, conditioned the Settlement on the termination of the Department's ongoing investigation of MECo's proposed recovery of stranded costs from the

[35] On January 13, 1994, FERC allowed an unexecuted MECo-MBTA distribution agreement to take effect subject to refund, pending the results of its investigation into the contract (id.; see also, FERC Docket No. ER94-129-000). Shortly thereafter, the Department opened its own investigation into the prudence of MECo's relationship with the MBTA, to determine whether recovery of any stranded costs was appropriate, and proceeded in parallel with FERC's own inquiry. Massachusetts Electric Company, D.P.U. 94-102, Vote to Open Investigation (May 13, 1994).

MBTA in D.P.U. 94-102 (Exh. MECo-3, workpaper MFF-28, at 10). The Settlement also provided that its approval by the Department would not constitute approval of, or precedent regarding, any principle or issue in D.P.U. 94-102, and placed no limits on the Department's right to review MECo's future purchased power cost adjustment ("PPCA") filings (Exh. MECO-3, workpaper MFF-28, at 15). By order dated April 3, 1995, the Department found the FERC-approved Settlement to be a reasonable resolution of the issues under consideration in D.P.U. 94-102, and terminated its inquiry. Massachusetts Electric Company, D.P.U. 94-102-2 (1995).

Since April 18, 1994, the MBTA has been receiving transmission service (Exhs. MECo-3, workpaper MFF-28, at 27; MECo-4, workpaper PTZ-5, at 4). Because of the loss of the 13 MBTA accounts, the Company made two revenue adjustments. First, MECo removed $2,832,815 in test year MBTA sales from test year revenues (RR-DPU-74; Tr. 1, at 129).[36] Second, the Company increased its test year MBTA transmission service revenues of $53,202 by $220,242, to reflect what it considers to be the normalized net transmission revenues of $273,444 during the period from October 1995 through September 1996 (Exh. MECo-3, workpaper MFF-28, at 1). According to the Company, had the MBTA remained a sales customer, MECo would have earned $2,906,309 in normalized net annual base revenues, of which $2,202,095 represented purchased power expense (Exh. AG-8-5).

b. Positions of the Parties

i. The Attorney General

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36 The Company made a corresponding reduction to its test-year G-1, G-2, and G-3 billing units to remove the MBTA sales from its rate design billing units (Exh. MECo-4, workpaper 5, at 4; Tr. 13, at 129).

The Attorney General opposes any attempt by the Company to recover from its remaining customers the lost revenues that resulted from the change in status of the MBTA from full service to transmission service (Attorney General Brief at 22). The Attorney General distinguishes the instant matter from the ordinary ebb and flow of old and new customers, reasoning that the loss of the MBTA as a sales customer is a case of first impression and presents a question of how the Department will address the issue of competition (id. at 22-23).

The Attorney General argues that a utility has an affirmative obligation to mitigate any damages that flow from the termination of service to a major customer, such as the MBTA, not only in the area of purchased power costs, but also selling off any excess capacity and deferring planned capacity expansions (id. at 23, citing Boston Edison Company, 56 F.P.C. 3414, 3429-30 (1976); Town of Norwood v. FERC, 587 F.2d 1306 (D.C. Cir. 1978). Before any utility is permitted recovery of revenues or margins lost due to competition, the Attorney General argues that it must, at a minimum, demonstrate that it has taken every reasonable step necessary to mitigate such losses (Attorney General Brief at 23; Attorney General Reply Brief at 7-8).

In this case, the Attorney General contends that MECo failed to meet its burden of proof in this regard, noting that the Company failed to bid for the MBTA's load in either its service territory or that of Boston Edison Company (Attorney General Brief at 23). Notwithstanding MECo's contract with NEP specifying seven years' notice prior to engaging in wholesale service to other utilities, the Attorney General claims that the Company failed to take any action to modify its NEP contract during the three years between the enactment of G.L. c. 164A, § 32 and April 1994 (id. at 24). The Attorney General contrasts MECo's "apparent unwillingness" to sell stranded assets with NEP's own efforts to enter the emerging competitive markets and points out that NEP failed to curtail its own capacity expansion plans in the face of MECo's loss of the MBTA (id. at 24-25, citing Exh. AG-8-9; Attorney General Reply Brief at 8).

The Attorney General argues that as a result of this failure to act, MECo's remaining sales customers have been harmed by the resulting increase in the Company's per unit purchased power costs from NEP (Attorney General Brief at 22).[37] The Attorney General considers the Company's preemption arguments to be "beyond the bounds of permissible advocacy," noting that MECo had accepted, as part of a settlement in D.P.U. 94-178 (1995), the deferral of any issues associated with additional revenue credits beyond those provided for in D.P.U. 94-102 and FERC Docket ER94-129-000 (Attorney General Reply Brief at 6, citing D.P.U. 94-178, at 4 n.6). Moreover, the Attorney General points out that the settlement in D.P.U. 94-102 was not dispositive of the issues concerning service to the MBTA (id. at 7, citing D.P.U. 94-102-2, at 3 (1995)).

The Attorney General notes that by the Company's own admission, if the MBTA had retained sales service at the 13 service locations, MECo's cost of service would have been reduced by $430,770 (Attorney General Brief at 22, citing Exh. AG-8-5).[38] In order to make

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[37] The Attorney General explains that NEP's rates consist of two declining blocks. The first block is for increments above a certain level of purchases ("tail block purchases") intended to reflect NEP's marginal capacity and energy costs (Attorney General Brief at 22, n.21, citing Massachusetts Electric Company, 66 FERC ¶ 61,036 (1994); 1994 WL 8818 (FERC 1994). The second block is the initial portion ("initial block purchases") and reflects NEP's average system costs less revenues received from tail block purchases (id.). Under this rate structure, a decline in tail block purchases results in fewer sales left available to spread over the higher initial block, thereby increasing the average cost of the initial block (id.).

[38] The Attorney General derived this amount by taking $2,906,309 in total sales, and subtracting $2,202,095 in purchased power costs and $273,444 in wheeling revenues currently earned under the Settlement (Exh. AG-8-5).

MECo's customers whole for the Company's actions, the Attorney General advocates imputing $430,770 in revenues, equal to what MECo would have received during the test year had the MBTA remained a sales customer (Attorney General Brief at 25, citing Exh. AG-8-5).

ii. The Company

The Company maintains that its actions with respect to the MBTA were prudent, and that no further adjustment to its cost of service is warranted (Company Brief at 38). MECo argues that, although the Attorney General was extensively involved both in FERC's proceeding on the matter and in D.P.U. 94-102, he is inappropriately using this proceeding to relitigate the issue (Company Brief at 34-35; 37-38).

MECo claims that it was fully responsive to state policy by designing and filing with FERC transmission rates that allowed the MBTA to gain access to the energy market on a timely basis (id. at 36). The Company argues that the Attorney General's "threshold demonstration" raised in this case is identical to that considered and decided in D.P.U. 94-102-2 (Company Reply Brief at 7). The resulting transmission rates, according to the Company, provided reasonably compensatory results for its customers, in that the base revenue shortfall of $430,770 was largely offset by the $310,000 in PPCA credits (Company Brief at 36).[39] The remaining discount of $121,000, the Company contends, would have been unlikely to induce the MBTA to remain a sales customer, and any efforts on MECo's part to bid on the MBTA's purchases would have been unlikely to mitigate the lost $121,000 (Company Brief at 36-37). In any event, MECo reasons, it

39 Under the Settlement, all MBTA transmission revenues earned in excess of the base rate are credited to MECo's retail customers through the PPCA (Exh. MECo-3, workpaper 28, at 14).

would not have been able to bid for the service because it must provide NEP with seven years' notice prior to entering into any wholesale service with another utility (id., citing NEP Tariff No. 1, Sch. I, Second Rev. Page No. 3).

The Company attributes the shortfall in revenues to the differential between the initial block and tail block of its FERC-approved tariff with NEP and its impact on the Company's average cost of purchased power (Company Brief at 37). MECo argues that the Department is preempted from challenging the validity of the FERC-approved rate's initial block and tail block, and must recognize the costs and revenues as reasonable for retail ratemaking purposes (id. at 37, citing Eastern Edison Co. v. Department of Public Utilities, 388 Mass. 292 (1983); Mississippi Power and Light Co. v. Moore, 487 U.S. 354 (1988); Nantahala Power & Light Co. v. Thornburg, 476 U.S. 953 (1986). The Company asserts that the Attorney General is preempted from collaterally attacking the decisions by the FERC and the Department (Company Brief at 37-38).

MECo states that if the Attorney General prevails on his argument for revenue imputation, the terms of the Settlement specify that the PPCA reconciliation would be credited back to April 18, 1994, and that the Company would not raise the issue of retroactive ratemaking (Company Reply Brief at 6, citing Settlement at ¶ 3). In the alternative, the Company would credit its cost of service directly, in the manner proposed by the Attorney General (Company Reply Brief at 6).

c. Analysis and Findings

In the absence of evidence that fluctuations in customer numbers vary significantly from the normal "ebb and flow" of customers, the Department does not adjust test year revenues for such changes. Western Massachusetts Electric Company, D.P.U. 85-270, at 177-178 (1986);

Fitchburg Gas and Electric Light Company, D.P.U. 1214, at 37-38 (1983); Bay State Gas Company, D.P.U. 1122, at 46-49 (1982). Revenue adjustments for customer losses are appropriate only when a utility has shown that the impact of the revenue loss is extraordinary, serious and adverse and that no signs exist of the loss being ameliorated by future sales growth. Western Massachusetts Electric Company, D.P.U. 85-270, above. Likewise, revenue adjustments for customer growth are recognized only when the change is known and measurable, and constitutes a significant adjustment outside of the "ebb and flow" of customers. Massachusetts-American Water Company, D.P.U. 88-172, at 8 (1989).

MECo has failed to establish that the revenue loss related to the 13 MBTA accounts is extraordinary. The Department finds that the loss of these accounts does not constitute a significant variance from the normal ebb and flow of customers. The Department further finds that the magnitude of the revenue loss to MECo from the loss of a portion of MBTA service does not represent a significant change from test-year revenues. Accordingly, the Department shall not reflect the test year loss of the MBTA sales customers in the Company's sales of electricity revenues, and therefore increases the Company's test year revenues by $2,832,815. Additionally, the Department shall not adjust the Company's test-year revenues for the MBTA transmission contract. Therefore, MECo's proposed revenues shall be reduced by $220,242.[40]

Consistent with this finding, the Department finds it appropriate to restore the test year billing determinants attributable to the MBTA, which the Company removed for rate design purposes. Otherwise, a significant mismatch between revenues and billing units will result. Accordingly, the Department shall rely on the information contained in Exhibit MECo-4,

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40 $273,444 (normalized revenue) - $53,202 (test-year revenue) = $220,242

workpaper PTZ-5, at 4, to derive the additional billing units.

2. CATV Revenues

a. Introduction

During the test year, the Company booked $1,489,933 in pole attachment revenues (Exh. MECo-3, workpaper MFF-29). On January 18, 1994, MECo entered into an agreement with the New England Cable Television Association ("NECTA") relative to revised pole attachment fees (Exh. AG-3-31). During the period from January 18, 1994 through December 31, 1995, NECTA member companies agreed to pay MECo $8.95 per attachment on each pole solely owned by MECo, and $4.48 per attachment on each pole jointly owned or used by the Company (id.). These fees will increase effective January 1, 1996 to $9.40 and $4.70, respectively (id.). Based on the number of poles in service as of the end of the test year, and the pole attachment fees scheduled to take effect in 1996, MECo estimates that its annualized pole attachment revenues will be $1,690,605 for the period from October 1995 through September 1996 (Exh. MECo-3, workpaper MFF-29). Therefore, the Company has proposed to increase its test year revenues by $200,672 (id.).

The Company provided a cost of service study ("1992 Study") which was used as the basis of its negotiations with NECTA, calculated in accordance with the standards prescribed by the Federal Communications Commission ("FCC"), using 1992 plant and operating data (Exh. AG-13-1). Based on the 1992 Study, MECo concluded that an appropriate pole attachment fee should be $13.77 for MECo-owned poles, and $6.89 for jointly-owned poles (id.). The Company provided an updated study to reflect 1994 operating and plant data ("1994 Study"), and concluded that the maximum pole attachment fees should be $14.41 for solely-owned poles and

$7.21 for jointly-owned poles (RR-AG-42).

b. Positions of the Parties

i. The Attorney General

The Attorney General contends that the Company's current pole attachment rates do not fully recover the embedded costs associated with those assets used for pole attachment space, and that firms using the Company's assets for their own business ventures must be required to compensate MECo and its ratepayers for those assets (Attorney General Brief at 25). According to the Attorney General, the Company's failure to collect its full embedded cost in its pole attachment rates shifts these costs to ratepayers (Attorney General Reply Brief at 10). The Attorney General distinguishes this case from D.P.U. 94-50, by noting that there the Department expressly stated that pole attachment rates and costs would not be examined (id. at 9, citing D.P.U. 94-50, September 19, 1994 Interlocutory Order at 12-13).

The Attorney General points out that MECo essentially has a monopoly on pole attachment services, and therefore those rates should be based on embedded cost of service (Attorney General Reply Brief at 10). He considers the information contained in the 1994 Study to provide a reliable estimate of the minimum level of costs that should be attributed to pole attachments (Attorney General Brief at 26, citing RR-AG-42). To the extent that the Company chose to underrecover these pole attachment rates, the Attorney General argues that they should come from shareholders, and not ratepayers (Attorney General Reply Brief at 10). The Attorney General proposes that the Company's test year cost of service be reduced by $933,442, representing the incremental embedded pole attachment costs not recovered under the pole attachment rates (Attorney General Brief at 26).

ii. The Company

MECo contests any additional adjustment for CATV pole attachments. The Company argues that it was unable to set its attachment rates using the data from its 1992 Study for two reasons. First, the Company noted that CATV companies were unreceptive to the tripling of rates supported by that study (Company Brief at 38). Second, MECo notes that its average pole height is not consistent with the standard used in the FCC formula (id.). The Company asserts that because the FCC standards specify a pole-by-pole analysis, it would have borne a substantial burden of proof in its negotiations with NECTA (id. at 38-39). MECO contends that under its settlement with NECTA, its pole attachment rates have been substantially increased in a manner consistent with the requirements of the FCC, Massachusetts law, and Department regulations (id. at 39, citing G.L. c. 166, § 25A; 220 C.M.R. § 45.00).

MECo also argues that the Department has previously found it inappropriate to reallocate the cost associated with pole attachments without revising the actual pole attachment rates (Company Brief at 39, citing D.P.U. 94-50, at 360). The Company contends that while D.P.U. 94-50 was not a general rate case, the Department applied rate case precedent to that earnings investigation, considered the issue of CATV revenues, and found that a cost reallocation of pole attachments costs was inappropriate without changing the actual pole attachment rates (Company Reply Brief at 8-9, citing D.P.U. 94-50, at 286, 360). The Company concludes that its attachment charges are reasonable, with the benefits of the increase fully reflected in its cost of service (Company Reply Brief at 9).

c. Analysis and Findings

G.L. c. 166, § 25A authorizes the Department to regulate the rates, terms and conditions applicable to pole attachments, and allows the Department either on its own motion, or that of a utility or licensee, to determine and enforce reasonable rates, terms, and conditions for such attachments. 220 C.M.R. § 45.00 et seq. While the Attorney General is not directly challenging the Company's pole attachment rates or the allocation of those costs, he contends that attachment licensees are undercharged for the service, and that the Company's shareholders should bear the responsibility for the resulting revenue shortfall. In addressing this issue, the Department first examines the nature of pole attachment rates, then evaluates their calculation.

With respect to the nature of pole attachment revenues, the Department has found that in the case of electric utilities, pole attachments constitute a separate and distinct service provided outside of regular operations. D.P.U. 906, at 89. Compare D.P.U. 94-50, Interlocutory Order at 12 (September 19, 1994). As a non-utility activity, the Department has consistently used a revenue credit approach to offset CATV pole attachment revenues against an electric utility's overall cost of service. D.P.U. 1720, at 79; D.P.U. 906, at 90. Thus, the Company's pole attachment service may be properly considered as an above-the-line activity. See D.P.U. 87-122, at 19-21.

In the case of an above-the-line activity, customers experience the benefit of any profitability associated with the non-utility program. Bay State Gas Company, D.P.U. 89-81, at 73 (1989). Incremental expenses may be defined as those incurred as a direct result of the pole attachments which are beyond the level necessary to provide basic service. D.P.U. 87-122, at 21. Stated otherwise, incremental expenses are those that could be eliminated if the non-utility program ceased to exist. The incremental program revenues are simply the gross revenues generated by the program. By comparing incremental revenues with incremental expenses, it is possible to obtain a measure of the direct financial impact of the non-utility program on customers. Id.

The Department has examined the Company's 1992 Study and 1994 Study. Neither study presents administrative or maintenance expense in sufficient detail to establish the precise level of MECo's incremental cost associated with pole attachments. However, the Department is able to conclude that the incremental cost would be substantially less than the 37.97 percent carrying charge factor used in the 1994 Study (RR-AG-42, at 4). Therefore, the Department finds that there are positive ratepayer benefits. Gross test-year revenues attributable to pole attachments were $1,489,933. Given the scheduled increase resulting from the NECTA settlement agreement, the rate year annualized pole attachment revenues will be $1,690,605 for the period from October 1995 through September 1996 (Exh. MECo-3, workpaper MFF-29). Based on the Department's comparison of incremental costs and revenues, we are unable to conclude that the current pole attachment rates fail to cover the incremental cost of providing attachment services to CATV companies. Accordingly, the Department is unable to impute additional revenues to the Company's pole attachment revenues.

We now turn to the Attorney General's argument that the Company is charging less for pole attachments than the maximum allowable rate under the FCC formula. The record contains insufficient evidence to support a finding that either MECo's 1992 Study or 1994 Study provides a reliable measure of the maximum allowable pole attachment rate. Specifically, the Department notes that the record contains no evidence of how MECo calculated either its net pole investment or its usable pole heights, two issues which have been the subject of prior proceedings brought under G.L. c. 166, § 25. New England Telephone, D.P.U. 91-218 (1991). Therefore, the

Department finds that the Attorney General's concern over the cost allocation techniques used in the 1992 Study and 1994 Study would be better addressed in the context of a proceeding brought under G.L. c. 166, § 25A.

Based on the foregoing, the Department rejects the Attorney General's proposed adjustment. The Department accepts the Company's proposed adjustment, and shall increase MECo's test-year revenues by $200,672.

3. Returned Check Fees

During the test year, MECo received $67,685 in revenues associated with returned check fees (Exh. MECo-4, at 36, exh. PTZ-3, at 12).[41] The Company has proposed a revision to its terms and conditions providing for an increase in returned check fees from $5.00 to $15.00 (id. at 36; exh. PTZ-17, at 1-2). The Company credited the incremental revenues of $135,380 in its allocated cost of service study (Exh. MECo-4, at 36, exh. PTZ-1R at 12). However, MECo did not reflect the test year or the incremental revenues associated with returned check fees in its revenue requirement calculations (Exh. MECo-3, exh. MFF-1, at 22).

The Department has approved the proposed increase in returned check fees. Section VII.D.2., below. Accordingly, the Department will increase the Company's revenues by $203,065 ($67,685 + $135,380) to reflect both test year returned check fee revenues and the approved increase in these fees. Commonwealth Electric Company, D.P.U. 956, at 62 (1982).

V. CAPITAL STRUCTURE AND RATE OF RETURN

A. Capital Structure

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[41] The Company processed 13,537 returned checks at $5.00 per check (Exh. MECo-4, PTZ-17, at 1-2).

MECo's proposed capital structure consists of $315,000,000 in long-term debt, $50,000,000 in preferred stock and $382,497,000 in common equity (Exh. MECo-6, exh. JGC-4, at 1). This reflects several post-test-year adjustments, including the following: (1) the issuance of an additional $59,000,000 of Series U first mortgage bonds, which were issued in nine series with various coupons and maturities; (2) the scheduled retirements in 1995 $10,000,000 of Series R first mortgage bonds and $25,000,000 of Series S first mortgage bonds (Exh. MECo-6, at 7). The Company provided a revised capital structure of $335,000,000 in long-term debt, $50,000,000 in preferred stock and $391,779,000 in common equity. This capital structure included the issuance of $20,000,000 in Series V debt issues, and a subsequent $10,000,000 capital contribution on July 3, 1995 (RR-DPU-58).

B. The Cost of Long-term Debt and Preferred Stock

1. The Company's Proposal

According to the Company, the call premiums for the Series M, Q and R bonds called during 1993 were amortized over the period of savings generated by the refinancing (Exh. MECo-6, at 8). Then, total interest and amortization expense was divided by total long-term debt outstanding to arrive at the final cost of 8.28 percent for long-term debt (RR-DPU-58). MECo calculated a 6.89 percent cost of preferred stock (Exh. MECo-6, exh. JGC-6, at 1). The Company provided a recalculated cost of long-term debt and preferred stock by amortizing the call premium expenses over the life of the new bonds. Using this approach the Company determined a long-term cost of 7.60 percent and a preferred stock cost of 6.32 percent (Exh. AG-10-4; RR-DPU-58).

2. Positions of the Parties

a. The Attorney General

The Attorney General opposes the Company's proposed calculation of long-term debt and preferred stock, claiming that the calculation is inconsistent with Department precedent. He contends that issuance costs and premiums on long-term debt and preferred stock should be amortized over the life of the issue, without providing a return on the unamortized balance (Attorney General Brief at 60-61, citing D.P.U. 85-270; Boston Edison Company, D.P.U. 86-71, at 12 (1986); Berkshire Gas Company, D.P.U. 90-121, at 160 (1990)).

b. The Company

The Company argues that its proposed amortization period for call premiums on the Series M, Q, and R bonds is reasonable and is consistent with the language of recent Department Orders (Company Brief at 72). MECo argues that as part of the Offer of Settlement in D.P.U. 93-194, it reserved its right to argue in its next general rate filing for a shorter call premium amortization period (id. at 71-72, citing D.P.U. 93-194, at 5). The Company claims that in all other respects, MECo's amortization of underwriter's discounts, issuance expenses, and call premiums conforms with Department precedent (id. at 72).

The Company claims that amortizing the call premiums over the period of the savings is consistent with recent Department Orders which indicate that these expenses can be amortized over a shorter period than the life of the issue (id. citing, D.P.U. 93-60, at 238-239; D.P.U. 92-250, at 136-37. The Company reasons that by linking the amortization of the call premiums to the savings generated, it will create an incentive to refinance long-term debt and preferred stock with lower cost debt, thereby benefiting customers through significant long run savings (id. at 73).

3. Analysis and Findings

The Department's precedent on the treatment of issuance expenses and call premiums in the calculation of long-term debt and preferred stock ratios is well-settled. The Department has ruled consistently that companies should amortize call premiums over the life of the issuance. Berkshire Gas Company, D.P.U. 90-121, at 160 (1990). The Company's reliance on D.P.U. 93-60 and D.P.U. 92-250 is misplaced. In those cases, the Department did not find that the call premiums were either extraordinary or that the time between these expenses could be normalized. Because the normalization period for these expenses cannot be determined in this case, the call premiums should be amortized over the life of the issuance. Regarding the Company's argument that allowing a shorter amortization period will create a stronger incentive for refinancing at better terms, the Company has an ongoing obligation to provide reliable service at the lowest cost to customers. Any savings realized by the refinancings should be considered part of this obligation; no further incentive is necessary or appropriate.

The Company's arguments do not justify a departure from our precedent regarding the amortization of call premiums. Accordingly, the Department finds that MECo's long-term debt cost is 7.60 percent and preferred stock cost is 6.32 percent (RR-DPU-58; Exh. AG-10-4).

C. Short-term Debt

1. Positions of the Parties

a. The Attorney General

According to the Attorney General, short-term debt should be included in MECo's cost of capital (Attorney General Brief at 58). The Attorney General argues that the Department has allowed short-term debt in the determination of revenue requirements (Attorney General Reply

Brief at 21, citing Eastern Edison Company, D.P.U. 1580-A at 8 (1984); Eastern Edison Company, D.P.U. 1130, at 91 (1982); Eastern Edison Company, D.P.U. 837/968, at 23-24 (1982)). In addition, according to the Attorney General, allowing short-term debt in the capital structure is standard in many other states (id. citing New England Telephone and Telegraph Company d/b/a NYNEX, 162 P.U.R. 4th 110 (1995); Wisconsin Public Service Corporation, 1994 WL 746906, at 8-9 (Wis. P.S.C. 1994); Pennsylvania Public Utility Commission v. National Fuel Gas Distribution Corporation, 1994 WL 776955, at 97-104 (Pa. P.U.C. 1994)).

The Attorney General asserts that since short-term debt is first applied to allowance for funds used during construction ("AFUDC") then the appropriate balance of short-term debt to be reflected in MECo's capitalization is the total balance, less an amount equal to the average amount of construction work in progress ("CWIP") during the test year (Attorney General Brief at 58). Therefore, the Attorney General recommends including short-term debt in capital structure in the amount of $50,970,000, at a cost of 4.71 percent, based on the average rate of interest paid by MECo for the average short-term debt during the previous twelve months (id. at 59). The Attorney General disagrees with the Company's argument that short-term debt balances are too volatile to include in MECo's capitalization, claiming that use of an average balance during a given period, such as the test year, would be representative (Attorney General Reply Brief at 22). Finally, the Attorney General argues that MECo's shareholders should bear the responsibility for carrying costs for unrecovered unamortized expenses, instead of relying on short-term debt for these purposes (id. at 22-23, citing D.P.U. 87-260, at 16-17; D.P.U. 86-71, at 13; D.P.U. 1720, at 89).

b. The Company

The Company notes that the Attorney General's proposed treatment of short-term debt was recently rejected by the Department (Company Brief at 67, citing D.P.U. 94-50, at 428-429). The Company characterized the cases cited by the Attorney General as "oblique references" dating back to the early 1980s (Company Reply Brief at 21 n.10). According to the Company, short-term balances at a specific point in time do not accurately represent the Company's long-term capital costs (id. at 22). MECo contends that its short-term debt is also used to fund the unamortized balances on storms, unamortized losses on required debt, unamortized reorganization cost, and miscellaneous deferred debits (Company Brief at 68). The Company pointed out that in 1994, the sum of its CWIP and these other account balances was $38 million; the average level of short-term debt was $48 million, which MECo considers to be a more consistent correlation than the one found by the Attorney General (id.).

2. Analysis and Findings

In D.P.U. 86-33-G at 380-381, the Department reaffirmed its policy of excluding short-term debt from capital structure. The Department notes the limited precedential value of decisions in other jurisdictions. The Attorney General's citations to Department precedent contained in his reply brief are inapposite to the facts of this case, in that they relate to the treatment of short-term interest deductions for income tax purposes. D.P.U. 1580-A at 8; D.P.U. 1130, at 91; D.P.U. 837/968, at 23-24. The Attorney General has failed to provide any new evidence or a convincing argument to support his recommended inclusion of short-term debt in capitalization. Accordingly, the Department rejects the Attorney General's recommendation.

D. Capital Contribution

The Company provided a revised capital structure that included a $10,000,000 capital contribution on July 3, 1995 (RR-DPU-58).

1. Positions of the Parties

a. The Attorney General

The Attorney General opposes MECo's inclusion of $10,000,000 in capital contribution on the grounds that this adjustment is beyond the scope of traditionally updated expenses (Attorney General Reply Brief at 24). According to the Attorney General, the Department has found that "... updates are limited to information on non-controversial items that have been examined adequately on the record, such as rate case expense and property taxes" (id. at 23, citing D.P.U. 93-60 (Hearing Officer's Ruling on Motion to Strike and Motion for Admission of Exhibits at 3, August 26, 1993)). The Attorney General argues that the timing of MECo's adjustment impairs the ability to determine whether the proposed equity contribution is reasonable or not (id. at 24).

According to the Attorney General, MECo has already a high common equity ratio when compared to other electric companies (Attorney General Brief at 59-60, citing Exh. MECo-5, exh. CEO-3, at 2). The Attorney General further argues that MECo's "lower business risk profile" as a distribution-only company does not justify having a higher equity ratio than other electric utilities (id. at 60) In addition, he argues that MECo did not incorporate any equity capital contribution as part of its financial forecast, thus making this adjustment a mere effort by the Company to increase its equity ratio for ratemaking purposes (Attorney General Reply Brief at 25, citing MECo-6, exh. JCG-1). Also, the Attorney General asserts that financial need and market conditions need not be a consideration of NEES in financing MECo since NEES controls the timing and amount of any issuance of common equity (id.).

b. The Company

The Company characterizes as "groundless" the Attorney General's attempt to reject MECo's capital contribution to its common equity balance (Company Brief at 70-71). First, MECo argues that the Attorney General's assertion that MECo has a relative high common equity ratio is inaccurate since MECo's equity ratio of 50.48 percent is consistent with or below the common equity ratios the Department has found appropriate in other recent rate cases (id. at 70, citing D.P.U. 94-50, at 426; D.P.U. 93-60, at 235; D.P.U 92-250, at 134). Second, MECo claimed that the Attorney General's characterization of MECo as a less risky company is questionable because the reality of a restructured electric industry could have a profound impact on MECo's financial future (id. at 70). Third, MECo maintains that its intention to revise its common equity balance for the capital contribution was clearly expressed during hearings (id. citing Tr. 10, at 103-104).

2. Analysis and Findings

The Department has found previously that companies are permitted to include known and measurable post-test-year changes in capital structure to reflect the most representative capital cost a company can expect to incur during the period in which the approved rates will be effective. D.P.U. 92-78, at 94. See also, Boston Edison Company, D.P.U. 85-266-A/85-271-A at 153 (1986); D.P.U. 906, at 106-109. The Department finds that MECo's current equity update is consistent with Department precedent. Therefore the Department approves the inclusion of MECo's latest equity update in its capital structure.

E. Rate of Return on Equity

1. Introduction

The Company proposed a return on common equity in the range of 12.0 to 12.5 percent with a specific recommendation of 12.0 percent, using a discounted cash flow ("DCF") analysis (Exh. MECo-5, at 37; Tr. 10, at 34). A DCF analysis determines the cost of equity capital by finding a discount rate which equates a given market price of a stock with the expected future flow of dividends (Exh. MECo-5, at 14).

MECo used the following equation to model its DCF analysis:

Expected Return on Common Equity $\quad K= (D / MP) + g$

where K is the investor's required cost of capital, D is the dividend yield, MP is the market price, and g is the expected growth (id. at 14).

Generally, a company's own stock price and yield history can be used in this analysis; however, MECo's common equity is not publicly traded. The Company, therefore, used two proxies: NEES, and a group of five comparable companies ("comparable companies" or "comparison group"), to develop and simulate the market-required rate of return for its common equity (id. at 21). In choosing a comparison group for his analysis, the Company selected companies which have (1) revenues of $500 million to $2 billion; (2) bonds rated A to AA- by Standard & Poor's; and (3) at least 75 percent of revenues derived from electric operations (Exh. MECo-5, at 28). In addition, MECo eliminated utilities which were significantly diversified, owned nuclear generation, or involved in any merger activity (id. at 28-29). Using this criteria, MECo obtained a sample of five utilities which it considered reasonably similar to itself in terms of various financial and operating characteristics (id.).[42]

In its DCF analysis of NEES, MECo calculated a dividend yield for NEES of 7.30 percent for the six months ending January 31, 1995 (Exh. MECo-5, exh. CEO-2, at 1). To estimate the growth rate for NEES, the Company analyzed three indicators: (1) historical growth rates in earnings, dividends and book value; (2) retention growth; and (3) analysts' forecasts (Exh. MECo-5, at 21, exh. CEO-2, at 1-5). Based on its analysis, MECo recommended a growth rate between 4.25 and 4.75 percent (Exh. MECo 5, at 25). The sum of the growth rate of 4.25 to 4.75 percent, a dividend yield of 7.30 percent, and a dividend yield adjustment factor of 0.16 to 0.17 percent to reflect future dividends resulted in an investor return requirement for NEES ranging between 11.71 to 12.22 percent (id. at 26).[43]

Similarly, MECo performed a DCF analysis on the comparison group (Exh. MECo-5; exh. CEO-3, at 1-10). To derive the dividend yield, the Company calculated the six-month (August 1994 through January 1995) average dividend yield (Exh. MECo-5, exh. CEO-3, at 3). This resulted in a dividend yield of 6.98 percent (id.). To derive the growth rate for the comparison group, the Company analyzed three indicators: (1) the average of five-year and ten-year least squares growth rates in earnings, dividends, and book value for each company; (2) the average of

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42 The Company's comparison group consists of Dayton Power & Light, Idaho Power Company, IPALCO Enterprises, KU Energy Company, and Oklahoma Gas and Electric Company.

43 According to the Company, a dividend yield adjustment factor is necessary to project future dividends, and thus estimate future growth (Exh. MECo-5, at 26). MECo calculated this factor by multiplying one-half the growth rate times the dividend yield (id.).

the internal growth for each company; and (3) the average projected earnings growth rates of investment analysts (Exh. MECo-5, at 30). Based upon these three indicators, MECo concluded that the average growth rate of 4.25 to 4.75 percent developed for NEES was appropriate for the comparison group (id. at 33-34). The Company then increased the dividend yield by its dividend yield adjustment factor of 0.15 to 0.17 percent and determined that the average DCF return for the comparable companies was 11.38 to 11.90 percent (id. at 34).

The Company proposed that the 11.38 to 11.90 percent investor return requirement should be further increased, so that MECo could go to the financial markets and obtain additional equity capital without dilution (id. at 36). MECo stated that a financing cost and market adjustment was necessary to compensate the Company for two cost-related items: issuance costs and a premium to provide protection against down markets (id. at 37). As a measure of issuance costs, MECo compared four public offerings of common stock for selected utility companies for the period 1982 to 1994, and concluded that the average financing cost was 3.34 percent (Exh. MECo-5, exh. CEO-4, at 1). Although, the Company's prefiled testimony stated that a "down market" adjustment is appropriate, MECo maintained that its cost of common equity did not take this into consideration (Exh. DPU-4-3). The Company concluded that the required return on common equity was between 12.0 and 12.5 percent (Exh. MECo-5, at 37). The Company stated that its proposed return on equity of 12.0 percent is at the bottom-end of that range (Tr. 10, at 34).

As an additional check on its DCF analyses, MECo conducted a risk premium, or interest premium, analysis (id. at 34). Risk premium analysis is based on the theory that the required cost of equity can be estimated by determining the prospective cost of long-term debt as a basis, and adding a risk premium to recognize the fact that the equity holder has only a residual claim on assets and earnings (id. at 35). The Company relied on the Ibbotson Study 1994 Yearbook which includes the actual earned returns of the common stock of the Standard and Poor's ("S&P 500") companies from 1926 through 1993. Based on this data, MECo concluded that the appropriate equity point premium was 6.4 percent, which when added to the average return of 8.7 percent on A-rated utility bonds between December 1994 and January 1995 resulted in a required return on equity of 15.1 percent (id. at 35-36).

2. Positions of the Parties

a. The Attorney General

The Attorney General considers the Company's DCF analysis "flawed" and the recommended return on equity excessive (Attorney General Brief at 82; Attorney General Reply Brief at 33). First, the Attorney General argues that the DCF analysis for NEES is inconsistent with Department precedent (Attorney General Brief at 64, citing Massachusetts Electric Company, D.P.U. 200, at 49-52 (1980)). According to the Attorney General, the use of NEES as a proxy was rejected by the Department in D.P.U. 92-78, at 110, for reasons which remain valid in this proceeding (id. at 64-65). Specifically, the Attorney General notes that the higher risk for an integrated versus a distribution utility overstates the cost of equity for MECo (Attorney General Brief at 65). In addition, the Attorney General maintains that there is a higher probability of retail electric competition becoming a reality in Massachusetts. According to the Attorney General, because NEES is a fully integrated holding company it will be exposed to a greater level of competition than MECo, which will remain a regulated monopoly as an electric distribution company (id. at 65).

Second, the Attorney General claims that the comparison group's business risk is substantially greater than that of MECo. For example, the Attorney General notes that unlike MECo, all five companies in the comparison group are fully integrated electric utility companies with a non-diversified fuel mix, and many have non-utility subsidiaries and joint venture projects (id. at 67-72). Also, the Attorney General claims that the comparison group faces greater financial risks by virtue of being fully integrated electric utilities (id. at 72-73). For example, each of the selected companies' long-term debt ratios are greater than that of MECo (id. at 73, citing Exh. MECo-5, exh. CEO-3, at 2) and MECo's common equity ratio of 53 percent is greater than the mean common equity ratio of the group of 51.5 percent (id.). Therefore, the Attorney General concludes that the comparable group analysis cannot be applied to MECo (Attorney General Brief at 73).

The Attorney General claims that the Company's growth rate component for the comparison group is far in excess of every proxy that was examined, and that there is no basis in the record to support MECo's proposed growth rate (id. at 75-76). The Attorney General recommends a growth rate of two to 3.3 percent, based on the growth in retained earnings and the most recent growth projections in the Institutional Broker's Estimate System ("IBES") (id. at 77, citing D.P.U. 87-260, at 104; D.P.U. 86-33-G at 354-356).

The Attorney General also argues that the dividend yield for the comparison group should be updated to reflect the most recent six-month figures, reducing the yield from 6.98 to 6.87 percent (id. at 78, citing Exh. AG-11-7, at 3). Thus, the Attorney General concludes that the correct DCF analysis on the comparable group would result in a return between 8.94 and 10.28 percent (id.).

The Attorney General urges the Department to reject MECo's risk premium analysis in support of a DCF analysis (id. at 78). According to the Attorney General, the Company's risk premium analysis is unacceptable because the Department has rejected the Ibbotson Study as unreliable (id. at 79, citing D.P.U. 83-33-G at 365). Also, the Attorney General maintains that the Company did not adjust the equity risk premium for the difference in investors's expected risk between the S&P 500 and MECo, which he claims would make the risk premium analysis more relevant. In addition, the Attorney General argues that the Ibbotson Study's risk premium is irrelevant because it is based on actual historical returns of common stocks of the S&P 500, as opposed to expected returns, and includes both utility and non-utility stocks (id. at 79-80).

The Attorney General also contests the Company's proposed adjustments for financing costs and market adjustments (Attorney General Reply Brief at 30). The Attorney General claims that although MECo states in its initial filing that no adjustment was made for down markets, the Company's brief mentions that MECo has included an adjustment for down markets (id. citing Company Brief at 80). Regarding issuance costs, the Attorney General argues that an issuance cost adjustment is unnecessary because issuance costs are already reflected in the expected return (Attorney General Brief at 80, citing D.P.U. 94-50, at 459; Boston Edison Company, D.P.U. 1350, at 166-167; D.P.U. 86-33-G at 368-369). The Attorney General reasons that because NEES has continuously issued stock for its dividend reinvestment programs and employee stock option programs, its issuance costs for large amounts of stock are negligible (id. at 81). In addition, the Attorney General claims the Company's proposed issuance cost, if allowed, would result in an annual $2,294,982 "windfall" for the Company (id. at 81). The Attorney General views MECO's attempt to use previous Department orders as a benchmark for calculating its return on equity as a "new approach" used to hide the failure of MECO's proxy analysis (Attorney

General Reply Brief at 31). The Attorney General argues that the four cases cited by MECo in defense of their proposed return on equity are misleading since these cases involve telephone and gas companies and are not comparable to MECo (id. at 31-32, citing D.P.U. 94-50; D.P.U. 93-60; D.P.U. 92-250; D.P.U. 92-111). He contends that NYNEX, Boston Gas Company, and Bay State Gas Company, unlike MECo, already deal with the risks of a competitive market place (id. at 32). In addition, the Attorney General maintains that the Department should rely on record evidence as opposed to previous comparisons of recommended returns (id.).

The Attorney General argues that the appropriate return on common equity should be in the range of 8.94 to 10.28 percent (Attorney General Brief at 78). This range is based on a DCF analysis of the comparison group, using a dividend yield of 6.87 percent,[44] and a growth rate of two and 3.3 percent derived from the figures for historical and forecasted growth in retained earnings, plus updated IBES projections (id.). Based on his determination that MECo's investment risk is lower than the comparable group, and a rejection of the issuance and market adjustments, the Attorney General asks that the Department grant MECo a return of nine percent (id.; Attorney General Reply Brief at 30). The Attorney General also argues that a lower updated yield of 6.75 percent supports further his proposed return of nine percent for MECo (Attorney General Reply Brief at 30, citing Exh. MECo-5, exh. CEO-3, at 3; RR-DPU-75).

b. The Company

The Company argues that its use of NEES as a proxy is appropriate, since MECo's customer base and distribution system are the principal elements of load and service on which

44 MECo updated this yield to 6.75 percent covering the period from February 1995 to July 1995 (RR-DPU-75).

NEES' entire integrated system is based (Company Brief at 75). In addition, the Company argues that other commissions have recognized the use of NEES as a proxy (id. at 75, citing Exh. MECo-5, at 20).

The Company objects to the Attorney General's recommendation of a nine percent return on equity as "too low" (Company Brief at 82). MECo argued that a nine percent return is not in the public interest, since it will not allow the Company access on reasonable terms to the financing necessary to continue to provide customers with high quality service (id.). The Company claims that the Attorney General's recommendation falls well below his recommended returns proposed in previous Department cases involving other utilities (id. at 81, citing D.P.U. 94-50; D.P.U. 93-60; D.P.U. 92-250; D.P.U. 92-111). According to the Company, the capital markets have not changed significantly since 1992 to justify the Attorney General's recommended return (id.).

3. Analysis and Findings

Because MECo is not a publicly-traded utility, the Department has evaluated various proxy measures put forward by the Company to determine an appropriate return on equity for MECo. These proxy measures include DCF analyses of a group of comparison companies and NEES, and a risk premium approach. The proposals offered by the Company herein mirror these earlier analyses.

With respect to the Company's DCF analysis of NEES as a proxy, the Department notes that it considered and consistently rejected similar arguments for the use of this proxy. D.P.U. 92-78, at 110; D.P.U. 200, at 49-54. The Company has failed to put forth any new arguments which would cause us to reevaluate the propriety of NEES as a proxy for MECo. Accordingly, the Department rejects the use of the Company's DCF analysis of NEES in this proceeding.

Regarding the DCF analysis of the comparison group, the record shows that the comparability of both the risk and growth factors is questionable based on such factors as the ownership of non-utility subsidiaries, generation responsibility, and a non-diversified fuel mix (See Exhs. AG-11-15; AG-11-15 Supp.). Therefore, the Department finds that the comparison group includes companies with more business risk than MECo. Accordingly, MECo's return on equity should reflect a smaller risk than that of the comparison group.

Similarly, the Company has failed to justify its proposed growth rate of 4.25 to 4.75 percent. While the Company stated that this rate was based on all historical and prospective growth rates, it acknowledged that the rate incorporated an assumption that long-term returns would improve from recent historical levels (Exh. MECo-5, at 34). The Department has indicated that the selection of an appropriate growth rate should take into consideration various quantitative measures, including growth rates in earnings per share, dividends per share, and retained earnings, as well as qualitative factors. D.P.U. 90-121, at 180.

The Company's analysis of the comparison group incorporated several upward adjustments. These adjustments include a dividend yield adjustment which is derived by multiplying one-half the growth rate times the dividend yield and a financing adjustment. While the Department has accepted the use of a dividend yield adjustment in other proceedings, we have rejected the inclusion of financing and market adjustments because investors incorporate a premium into their expected return to reflect market risks and financing costs. D.P.U. 90-121, at 178-180; D.P.U. 88-135/151, at 125-126; D.P.U. 88-67, at 192-193.

Based on the above considerations, the Department finds that the Company's DCF analysis overstates the required return on common equity for MECo. Therefore, the Department shall place limited weight on the Company's DCF analysis. With regard to MECo's risk premium analysis, the Department accords less weight to this method in the calculation of the cost of common equity. D.P.U. 90-121, at 171; D.P.U. 88-135/151, at 123-125; D.P.U. 88-67, at 182-184. The Department also has rejected specific aspects of such an analysis, including the use of the Ibbotson Study on the grounds that it contains too much statistical variance, and included non-utility companies whose data were not comparable to a utility. D.P.U. 85-270, at 234-235; D.P.U. 90-121, at 171-172; D.P.U. 86-33-G at 364-365; D.P.U. 1350, at 169. Accordingly, the Department places little weight on the Company's risk premium analysis.

The standard for determining the allowed return on common equity is set forth in Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679 (1923) ("Bluefield"), and Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1942) ("Hope"). The allowed return on common equity should preserve the Company's financial integrity, allow it to attract capital on reasonable terms, and be comparable to earnings on investments of comparable risk. Id. The Department has considered various factors in setting an appropriate return on equity, including the historical and projected growth rates, the Company's most recent long-term bond offering rates, the growth rates on a number of economic indicators, and the range of returns on equity granted in recent Department rate cases.

The Department does not accept the Company's argument that its return must be set at the same level or above that of other utilities. D.P.U. 89-194/195, at 199. The determination must reflect the fact that market and financial conditions are dynamic and take current conditions into account. The record in this case reveals that the key economic indicators such as the growth rate in retained earnings, and growth in earnings and dividends per share, indicate that a return on equity substantially below the rate proposed by the Company is appropriate. Based on a review of the record the Department finds that the Company's DCF analysis of the comparison group overstates the rate of return that is appropriate for MECo in light of the current economic conditions.

Based on the evidence in the record, the Department finds that an allowed return on common equity of 11.00 percent is within a reasonable range that satisfies the standards set forth in Bluefield and Hope, and is appropriate in this case.

VI. COST ALLOCATION

A. Cost of Service Study

The Company's proposed allocated cost of service study ("COSS") is designed to determine the revenue requirement to be recovered from each rate class (Exh. MECo-4, at 8). The basic principle applied in the COSS is that the allocation of plant investment and expenses to each rate class should be based on the degree to which such property or expenses are used by each rate class (id.). The COSS is based on test-year revenues and expenses for the twelve-month period ending September 1994 (id. at 9).

The COSS first separates rate base and expenses into functional categories consisting of power supply expenses, transmission, distribution, customer- and streetlighting-specific (id.). Distribution-related costs are further subdivided into delivery voltage levels consisting of primary, step-down transformation, and secondary distribution (id.). Any direct cost identified with a functional category is assigned to that function and any other costs that cannot be identified with a functional category are functionalized in proportion to a related direct or indirect cost (id.).

After expenses were functionalized and classified, appropriate allocators were developed and used to allocate costs to various rate classes (id.). The sum of the allocated costs to each rate class represents the revenue requirement for that class (id.). Rate of return was allocated to each rate class on an equalized basis according to each class' allocated portion of the rate base (id. at 9). The Company summarized the results of its COSS, including the proposed class revenue targets and the revenue increases over the present class revenues (Exhibit MECO-4, exh. PTZ-1R, at 1).

B. Purchased Power Expenses

1. The Company's Proposal

The Company stated that virtually all its electric power supply expenses are represented by its wholesale power bill from NEP (Exh. MECO-4, at 10). These expenses are separated into demand- and energy-related components (id.). In its COSS, the Company proposed separate allocators for each of these two cost components (id. at 10, 13).

a. Demand-Related Purchased Power Expenses

To allocate demand-related purchased power expenses from the NEP wholesale power bills, the Company proposed the wholesale hourly allocation method for demand costs ("WHAMD") (id. at 10). The WHAMD allocates demand expenses to each hour based on that hour's incremental responsibility for causing peak loads (id.). Low load hours have a small responsibility for causing peak loads because those hours share their loads with many hours in a given month resulting in lower unit demand costs or prices (id.). On the other hand, the highest load level results in a higher price because it is the only load level which causes the last increment of cost (id. at 10-11).

Once the hourly prices are determined, these are applied on the hourly KW load research estimates for each rate class to determine the cost in each hour incurred by that rate class (id. at 11). The total annual cost incurred by each rate class is equal to the sum of that class's hourly costs for that year (id.). The allocator for each rate class is equal to the ratio of the class's annual cost divided by the total Company cost (id.).

The Company stated that the Department ordered MECo to "be prepared to limit the allocation of capacity-related purchased power costs to only those that are within 80 percent of NEP's peak or explain why its proposed method is appropriate" (id. citing Massachusetts Electric Company, D.P.U. 89-21, at 16 (1989)). The Company noted that, although the Department approved its demand charge allocator in its last rate case, the Department expressed a number of concerns about the method used by the Company in developing such an allocator (id. at 12, citing D.P.U. 92-78). First, the Company used an old costing period study (id.). Second, MECo's costing periods were based on NEP's load and not on MECo's load (id.). The Company claimed that these two concerns have been addressed in its present filing through a revised costing period study which uses MECo's test year hourly loads and NEP's recently approved wholesale tariff W-95(S) (id.).

Third, the Company included hours in the WHAMD calculations which are below 80 percent of NEP's monthly peak while excluding loads outside the on-peak period which are above 80 percent of NEP's peak (id.). The Company claimed that this concern also was addressed in its present filing by using WHAMD allocators at NEP's W-95(S) tariff restricted to the hours above 80 percent of NEP's monthly peak load in the peak period of 8:00 a.m. to 9:00 p.m. weekdays, excluding holidays (id. at 12-13). The Company added that its proposed allocator reflects cost incurrence under NEP's tariff and the results of the Company's updated costing period study using

MECo's load (id. at 13).

b. Energy-Related Purchased Power Expenses

To allocate energy-related purchased power expenses incurred under NEP's wholesale power bills, the Company proposed the wholesale hourly allocation method for energy costs ("WHAME") (id.). The WHAME develops unit energy charges or prices for each hour according to the load level at that hour (id.). The load level at each hour is broken into two components: (1) the component which meets the initial block criteria of NEP's W-95(S) rate; and (2) the component which exceeds the initial block level and is priced at the tail block level (id. at 13-14). A weighted average of the initial and tail block energy prices is computed for each hour in the year, and each rate class' load in each hour is charged the weighted average price. The sum of the annual charges for each rate class represents the cost allocated to that class (id. at 14).

2. Positions of the Parties

a. The Attorney General

The Attorney General opposes the Company's proposed allocation method for purchased power expenses (Attorney General Brief at 83).[45] The Attorney General asserts that the allocation of purchased power expenses should include the allocation of excess power supply costs associated with the lost and/or unrealized sales to industrial customers (id. at 85, 88). The

[45] The Attorney General states that of the $60.7 million revenue increase which MECo proposed in this case, $54.8 million or 90 percent of this increase is proposed to be allocated to the residential class (Attorney General Brief at 82). The Attorney General states that the Company's cost allocation proposal is inconsistent with rate design precedent and fairness principles, and would be contrary to one of the interdependent principles agreed upon in the Department's electric restructuring docket, D.P.U. 95-30, which states that in the near term rates for all customers should be meaningfully lower than they would have been under the current system of rate regulation (id. at 82-84).

Attorney General claims that NEP forecasts an excess capacity for the summer of 1996, the period which coincides with the rate year for this case (id. at 85-86).[46] The Attorney General asserts that the excess capacity and the excess baseload capacity that exists today were the results of forecasted industrial sales that were lost and/or unrealized (id. at 87-88).[47]

The Attorney General claims that sales to industrial customers are risky and vary with the economy and the customer's competitive position in its particular industry (id. at 91).[48] To support this claim, the Attorney General states that industrial forecast errors ranged from 1.51 times the system average error for the 1989-1990 NEES forecasts for 1995, to 3.76 times the system average error for the 1987-1991 MECo forecast for 1994 (id. at 87, citing Exh. AG-2, exh. PLC-13). The Attorney General notes that in contrast, the residential error was always smaller than the system average error and actually offsets the industrial error, especially in the

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[46] The Attorney General suggests that the Department should not give any weight to the reduced estimate of 406 megawatts ("MW") for NEP's excess capacity for the summer of 1996, shown in its 1995 integrated resource plan, because such forecast was filed on June 1, 1995 and has not been reviewed by the Department (Attorney General Brief at 86 n.40). The Attorney General asserts that the correct level is 556 MW which was agreed upon by the parties in a settlement approved by the Department in Massachusetts Electric Company, D.P.U. 94-112 (1994) (id.).

[47] The Attorney General claims that excess capacity and excess baseload capacity are independent noting that when plants that were built to run a high percentage of the time do not run at their full availability, there is excess baseload generation capacity even if all of the capacity is needed at times of peak demand (Attorney General Brief at 88, 93 n.45, citing Exh. AG-2, at 12).

[48] The Attorney General claims that MECo's proposal to offer the service extension discount to very large industrial customers on the condition that they take all their electricity purchases from MECo for five years, is an acknowledgment of the riskiness of sales to those large customers (Attorney General Brief at 83). The Attorney General asserts that requiring the residential customers to pay 90 percent of the additional cost of service by "[l]owering the cost allocation to the riskiest customers and raising the allocation to the least risky customer is perverse" (id.).

MECo system (id. citing Exh. AG-2, at 18).[49]

In addition, the Attorney General quantifies the relative class risks of sales (id.). The Attorney General states that forecasting for sales in the years 1991 through 1994, NEES' average percentage forecasting errors by class for three to six years into the future show that the average absolute error was 3.6 percent for residential sales, 5.6 percent for commercial sales, and 10.8 percent for industrial sales (id.). The Attorney General notes that the industrial error is approximately twice the commercial error, and three times the residential error (id. at 91).[50]

The Attorney General claims that the associated cost of NEP's excess capacity of 556 MW for the summer of 1996 is approximately $60-$70 million; at a reduced estimate of 406 MW of excess capacity, the associated cost is approximately $46 million (id. at 86). In addition, the Attorney General claims that NEP has excess baseload capacity with a capitalized energy cost of approximately $182 million (id.). The Attorney General maintains that its analysis is not flawed,

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49 The Attorney General states that using the 1995 integrated resource plan filed with the Department, the industrial error ranged from 1.77 times the system average error for 1989-1990 NEES forecast for 1995, to 3.40 times for the 1987-1991 MECo forecast for 1994 (Attorney General Brief at 87 n.42, citing Exh. AG-2R, exh. PLC-13; RR-DPU-81).

50 The Attorney General claims that the forecasts of sales prepared during the period from 1985 to 1995 included projections of demand-side management ("DSM") (Attorney General Brief at 87). The Attorney General rejects the Company's suggestion during the proceeding that DSM may have contributed to the excess capacity situation and therefore DSM commitments should be terminated as a way to reduce excess capacity (Attorney General Brief at 89-90). The Attorney General claims that such a position is inconsistent with Massachusetts General Laws and Department precedent (id. at 90, citing M.G.L. c. 164, §§ 69I, 69H; Massachusetts Electric Company, New England Power Company, D.P.U.93-138/157-A at 9, 10 (1994); Western Massachusetts Electric Company, D.P.U. 89-260 (1990)). The Attorney General also claims that the forecasting errors prior to the inclusion of DSM indicate the same results: that residential errors are small compared to the commercial and industrial errors (id. at 89-90, citing RR-DPU-80).

stating that the errors claimed by the Company have been addressed, and that the excess capacity and excess baseload capacity cost estimates are supported by the record in this case (Attorney General Reply Brief at 36-38).

The Attorney General contends that since the excess capacity is the result of forecasted industrial sales that were lost and/or unrealized, the costs of that excess capacity should be allocated to the customers who caused their incurrence (Attorney General Brief at 88). The Attorney General claims that MECo's share of the excess capacity cost and excess baseload capacity costs is 72.80 percent (id. at 88). The Attorney General argues that since industrial customers are more expensive to serve due to their risk in load, fairness requires that cost allocation should recognize such differential in risk (id. at 92). Accordingly, the Attorney General suggests that the resulting excess capacity costs should be allocated in proportion to the overforecasting of the coincident peak loads that results in NEP obtaining too much total capacity (id. at 93, citing Exh. AG-2, at 16-20, exhs. PLC-15, PLC-16). The Attorney General also suggests that excess baseload capacity costs be allocated in proportion to the overforecasting of class energy requirements that resulted in NEP obtaining too much baseload capacity (id. at 93, citing, Exh. AG-2, at 16, 19-20, exhs. PLC-14, PLC-16).

The Attorney General asserts that the environmental benefits associated with new supply additions have no bearing on the issue of excess capacity and the failure to recognize the risks in serving industrial customers (Attorney General Reply Brief at 38). The Attorney General contends that whatever the level of excess capacity, there is a significant amount of associated costs, and if the Department does not agree with the Attorney General's proposed method, then the Department should order the Company to calculate the costs associated with the excess capacity and allocate those costs to the rate classes that caused them (id. at 36-38).

The Attorney General asserts that its proposed allocation method does not ignore the basis on which MECo actually incurs costs and that such a proposal allocates excess capacity costs associated with NEP's purchases and commitments under its FERC-approved tariff (id. at 96). The Attorney General claims that, for example, the WHAMD allocator is based on data and analyses of NEP's power production (id. at 94-95). The Attorney General concludes that its proposed allocation method for purchased power expenses and that of the Company are alternative ways to allocate costs that MECo incurs under the FERC-approved NEP tariff (id.).

The Attorney General contends that there is no legal or rational public policy impediment that would prevent the Department from giving explicit ratemaking recognition to the risks attendant with sales to large industrial customers (id. at 92). The Attorney General claims that its proposed allocation is consistent with the proposition that a state public utility commission has jurisdiction over the allocation of wholesale cost recovery on the retail level provided that the state commission respects all FERC-approved wholesale rates (id. at 95).[51] The Attorney General also claims that it is within the Department's discretion to determine how NEP's costs are to be

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[51] The Attorney General notes that FERC's jurisdiction over wholesale rates preempts state commissions from disallowing the recovery of FERC-mandated wholesale costs (Attorney General Brief at 95, citing Montana-Dakota Utilities Company v. Northwestern Public Service Company, 341 U.S. 246, 251-252 (1951); Nantahala Power & Light Company v. Thornburg, 476 US 953 (1986)). The Attorney General, however, points out that the United States Supreme Court also has held that a state can regulate a sale at local retail rates to ultimate customers (id., citing FPC v. Southern California Edison Company, 376 U.S. 205, 214 (1964); Illinois Natural Gas Company v. Central Illinois Public Service Commission, 314 U.S. 498, 504 (1942); Narragansett Electric Company v. Edward F. Burke et al. 381 A.2d 1358, 1361 (1977)).

allocated at the retail level (id. at 95-96).[52]

The Attorney General adds that in Boston Edison Company, D.P.U. 18200/18200-A (1975), aff'd sub nom. Boston Edison Company v. Department of Public Utilities, 375 Mass. 1 (1978), cert. denied, 439 U.S. 921 (1978), the Department allocated a disproportionate share of a rate increase to commercial and industrial ("C&I") customers because they were found to be directly responsible for the Company's need for increased revenues to provide new capacity (Attorney General Reply Brief at 34-35). The Attorney General asserts that the circumstances in the present case are directly analogous to those in D.P.U. 18200/18200-A that would require the Department to provide appropriate recognition of the unfair cost burden imposed on residential customers, costs which were incurred to serve other customers (id. at 35). The Attorney General emphasizes that his position "concerns the allocation of excess capacity costs, not as the Company seems to suggest, the appropriateness of load forecasts" (id.). The Attorney General states that since the prudence of these costs has not been raised in this case, he submits that this cost allocation issue should be resolved by the Department in this case (id.).

The Attorney General asserts that his proposed allocation will not lead to unstable rates (id. at 38). The Attorney General states that the Department must balance the objectives of equalizing class rates of return and rate continuity and that there is no legal requirement that each rate class must produce equal rates of return (id. at 39).[53] The Attorney General adds that with

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52 To support this assertion, the Attorney General cited M.G.L. c. 164, § 94; Massachusetts Electric Company v. Department of Public Utilities, 419 Mass. 239-247 (1994); Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 47 (1978), cert. denied, 439 U.S. 921 (Attorney General Brief at 95-96).

53 To support this assertion, the Attorney General cites Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 84 (1984); Apartment House Council of Metropolitan

proper balancing of cost allocation goals, an appropriate rate can be designed that recognizes the risks of serving industrial loads (id. at 39-40). The Attorney General recommends that, if rate continuity concerns may limit the reallocation to industrial customers, the residential rate class increase should be the minimum required for consistency with other policy objectives (Attorney General Brief at 97).

b. The Energy Consortium

The Energy Consortium states that the Company's COSS is consistent with prior orders of the Department and specifically the last two rate case Orders in D.P.U. 92-78 and Massachusetts Electric Company, D.P.U. 91-52 (1991) (Energy Consortium Brief at 5). The Energy Consortium notes that based on the Company's proposed COSS, the average residential rate would be 123 percent of MECo's 1994 average rate but less than the amount that MECo's 1994 average rate exceeds the national average rate (id. at 3-4, citing RR-TEC-1). The Energy Consortium also notes that the resulting industrial rate would be 146 percent of MECo's 1994 average rate which is higher than the rate at which MECo's average rate exceeds the 1994 national average rate (id.). The Energy Consortium states that the allocation of costs presented by MECo moves in the proper direction so that all rates are an equal distance above the national average (id. at 6). The Energy Consortium asserts that although a single allocation may seem reasonable in isolation, it is the result of all the cost allocation and rate design decisions reflected in the rates that is most important (id. at 4). The Energy Consortium recommends approval of the Company's proposed COSS in this case (id. at 5).

Washington, Inc. v. Public Service Commission of the District of Columbia, 332 A. 2nd 53, 57 (1975) (Attorney General Brief at 39).

The Energy Consortium opposes the Attorney General's excess capacity allocation proposal (Energy Consortium Reply Brief at 1). The Energy Consortium concurs with the Company that the Attorney General's proposal is inconsistent with Department precedent, is filled with factual mistakes and overstates the problem, represents a poor policy choice that will destabilize rates, harms the competitive position of large users, and could ultimately cause greater cost allocation to residential customers (id. at 1-2).

The Energy Consortium contends that the Attorney General's allocation method is inappropriate (id. at 2). The Energy Consortium reasons that there is no excess capacity for MECo since it does not own any generating capacity and does not have any power contracts for capacity (id.). The Energy Consortium argues that the Attorney General's method of going behind NEP's FERC-approved wholesale tariff and then assigning costs based on NEP's cost incurrence and not on MECo's cost incurrence is inconsistent with Department precedent regarding the allocation of MECo's purchased power costs from NEP (id.).

The Energy Consortium also asserts that it would be inappropriate if the industrial customers, who responded to the DSM programs offered by the Company, would be penalized for their active involvement and financial payments which in 1994 provided 194 MW of summer load savings to the system (id. at 2-3). The Energy Consortium concludes that the Department should follow its existing precedent rather than adopt the Attorney General's analysis that would reallocate approximately $68.7 million to the industrial customers (id. at 3).

c. The Company

The Company claims that the Attorney General's proposal is inconsistent with Department precedent regarding MECo's allocation of its purchased power bills from NEP (Company Brief at

84). The Company states that the rationale for the Department precedent is sound because it keeps the focus on MECo's costs for developing its rates rather than using information outside of the discovery in this case and about projects and contracts to which MECo is not a party (id. at 84). The Company adds that the Attorney General's proposal is unnecessary and out of order because it represents a relitigation of NEP's wholesale power costs in designing MECo's retail rates (id.).

The Company argues that the Attorney General's analysis is flawed because it ignores the fact that, while long run forecasts create a smooth line based on long term trends, short term business cycles would result in deviations from the long term forecasts (id. at 85). The Company asserts that these deviations are expected and tolerable as long as the forecasts meet the system's needs over the long term forecast period (id. at 86). The Company asserts that in the 1994 forecast, NEP's capacity is projected to be only 284 MW or 5.5 percent above its required capability responsibility for 1995 and only 556 MW or 11 percent for 1996 (id. at 86).[54] The Company adds that in the 1995 plan update, the corresponding figures were 169 MW or 3.2 percent above capability requirements for 1995 and 406 MW or 7.7 percent for 1996 (id. at 87). The Company claims that the forecasts and plans have operated successfully to match load and resources from 1994 through 1996 (id.).

The Company states that there are several errors in the Attorney General's analysis of NEP's costs and projects that prevent a reasonable determination of this issue even if one agrees with the underlying theory of the analysis (id. at 84). The Company states that these errors

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54 The Company notes that following the July 21, 1994 summer peak, the 1995 capacity above required reserve was reduced to 6 MW or 0.1 percent (Company Brief at 87, citing Exh. MECo-12, exh. 8).

overstate the cost of excess capacity and claims that with an analysis that is "[c]orrectly done, the Department would find no excess capacity in 1994, the test year in this case, 1995, or 1996, and no excess costs associated with the latest resources added to the system" (id. at 89).[55] The Company asserts that there is no excess capacity in NEP's system where capability responsibility and capacity are properly matched (Company Reply Brief at 28). The Company adds that the 406 MW is a temporary surplus for 1996 caused by the timely addition of 432 MW associated with the repowering of the Manchester Street project (id.). The Company asserts that the lower than expected sales to industrial customers have not produced excess capacity for MECo customers because NEP has implemented several steps including power sales, plant closings and Independent Power Producer buyouts in order to keep NEP's capacity and capability requirements in balance (id. at 28-29).

The Company adds that the Attorney General failed to recognize the significance of the industrial DSM programs as they mature which provided 194 MW of summer load savings and 90 percent of the cumulative energy savings from all DSM programs (id. at 90). The Company asserts that the Attorney General's analysis would penalize the business customers for their DSM efforts (id. at 90; Company Reply Brief at 27).

The Company also claims that the Attorney General's proposed allocation would lead to unstable rates because industrial loads fluctuate more with business cycles than residential loads

[55] The Company claims that these errors include the use of 843 MW of excess capacity in 1996, dividing 843 MW by load instead of capability responsibility thereby overstating the excess capacity, failure to incorporate the cost of DSM in the excess capacity calculations, using prices of energy well below the current long-term market price in the calculation of capitalized energy costs, and failure to account for any environmental benefits associated with the use of new supply additions (Company Brief at 88-89).

(Company Brief at 90). More specifically, the Company asserts that the Attorney General's "approach would produce surcharges for industrial customers at the bottom of the business cycle when the industrial customers are least able to bear the increased costs, and relieve them from costs in boom times when they grow faster than forecast and have the ability but need the incentive to invest in conservation and load management" (id. at 91; Company Reply Brief at 27). The Company concludes that although it agrees with the Attorney General's suggestion that industrial customers have different load profiles and present different challenges, the Attorney General's proposed solution would exacerbate rather than solve the problem (Company Brief at 91).

The Company contends that the Attorney General is incorrect in asserting that its proposed allocation method is consistent with MECo's cost incurrence under NEP's wholesale tariff (Company Reply Brief at 28 n.12). The Company states that, for example, although NEP has a specific provision in its tariff that allows for the reimbursement of service extension discounts, NEP has no surcharge provision in its tariff for industrial sales that are initially forecast but do not materialize (id.). Instead, MECo's purchased power expense is determined by total company demand at the time of NEP's peak and total energy requirements from all customer classes (id.).

The Company further claims that the Department's cost allocation decision in D.P.U. 18200/18200-A does not support the Attorney General's cost allocation proposal (Company Reply Brief at 26-27). The Company asserts that the Department's decision in that case was based on marginal cost principles, allocating the incremental costs of increased loads to the customers who caused those additional loads (id. at 26-27). The Company claims that, on the contrary, the lower than projected growth by industrial customers in this case is not causing MECo to incur marginal costs (id. at 27). The Company adds that increasing the price of electricity to industrial customers during an economic downturn would send incorrect price signals (id.).

3. Analysis and Findings

The Department notes that the Attorney General has proposed a major change in the existing allocation method of MECo's purchased power costs. In D.P.U. 92-78, at 136-147, the Department approved the Company's WHAMD and WHAME with certain modifications which the Company incorporated in its proposal in the instant docket. In D.P.U. 92-78, at 136-147, the Department approved the WHAMD and WHAME following the method earlier approved by the Department which determines the hourly costs of meeting each class's load based on the existing wholesale tariff of NEP. In other words, the existing method requires the Company to calculate the purchased power costs of each rate class on an hourly basis based on the class's hourly load and the costs of such load based on the FERC-approved wholesale rates of NEP.

The record in the instant docket shows that the Attorney General's proposed method would require inquiry into the planning, plant acquisition and retirement, and operation of NEP. The record also indicates that although there appears to be excess capacity for certain forecast years, the levels of that excess capacity vary depending on when those forecasts were made such that in some years overforecasts for one rate class provided the needed capacity to cover the underforecasts in another rate class (Exh. AG-2, exh. PLC-12; Tr. 15, at 105-110). In addition, although the load levels of industrial customers could be more affected by the changes in the economy than those of residential customers, changes in weather could have greater impact on residential loads.[56] Consideration of these and other factors, such as the impact of DSM programs, could result in an excess capacity for a given rate class if calculated on an annual basis but could provide different results if calculated on a medium- or long-term basis based on different periods when forecasts are made.

An inquiry into NEP's capacity cost incurrence in developing MECo's retail rates may raise jurisdictional issues if a detailed scrutiny into NEP's planning, plant acquisition, costing, dispatch and operations were undertaken during MECo's rate proceeding. This concern becomes more significant in the light of the Department's recent directive to functionally separate generation from transmission and distribution and increase reliance on competition in the generation component of a utility's operations. See Electric Restructuring, D.P.U. 95-30, at 15-29 (1995).

Such a restructured industry could provide customers a broader range of choices including the sourcing of their power supplies. The Department notes, for example, to the extent that competition provides customers more choices, residential customers could pool their loads and purchase electricity at market-based rates that incorporate the risk of sales to them as a customer group. In that instance, the Attorney General's proposed method of excess capacity costs allocation based on differentials in class sales risks may no longer be relevant or applicable.

In addition, imposing added costs due to greater risks of sales to the C&I classes and correspondingly reducing costs to the residential class could result in a rate of return for the C&I classes that would be less than that for the residential class. The Department will not, at this time, make such a major departure from its existing precedent.[57] Accordingly, the Department rejects

56 See, for example, DPU-RR-83, at 158, Rohr, Robert J. and Mark S. Stumpp, "Differential Class Rate of Return: Some Theoretical and Empirical Results."

the Attorney General's proposed excess capacity cost allocation.

Regarding the Department's cost allocation decision in D.P.U. 18200/18200-A, the Supreme Judicial Court noted in that case that the:

> Department accepted the basic principle underlying the Company's proposed rate structure and fashioned experimental rates allocating the rate increase according to the relative contribution of customer classes to the growth in peak-load demand for electricity .... However, the Department modified the Company's proposal by exempting the first 384 KWH of monthly residential usage from the rate increase, on the ground that this segment of residential usage had not contributed significantly to the growth in peak-load demand.

Boston Edison v. Department of Public Utilities, 375 Mass. 1, 46 (1978).

The instant case is distinguishable because there are no additional marginal costs to allocate.

The Department finds at this time that the WHAMD and WHAME method is the preferred method for cost allocation of MECo's purchased power expenses, because any hourly changes in the load and energy sales to each rate class are properly cost based on the NEP wholesale rate as approved by FERC. The Department, however, notes that to the extent that there are statistically verifiable differences in the risk of sales of electricity to the various rate classes, fairness and cost causation principles would appear to justify the identification and evaluation of those differences, including the quantification of their corresponding costs.[58] The

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57 The Department is also concerned that there might be a need to investigate further the impact on the appropriate level of investors' required rate of return if differences in rates of return among rate classes due to risks of sales were recognized. See, for example, RR-DPU-83, Rohr and Stumpp at 163.

58 Commentators have noted, for example, that "any restructuring of rates based on risk differentials between customer groups must be founded on an investigation of the risks associated with serving the various customers, not on the basis of a general rule that one class of customers is less risky that another" (RR-DPU-83, Rohr and Stumpp, at 163). Others have concluded that "there appears to be little justification for charging different margins by rate classes" due to differences in risks of sales (RR-DPU-83,

Department, therefore, directs the Company to investigate this cost allocation issue and provide the results of such an investigation in the Company's next proposal to address the cost allocation issues raised by the Department in this case.

C. Distribution Plant and Expense Allocators

1. The Company's Proposal

The Company proposed that the distribution capacity-related costs that are functionalized as primary, step-down transformer, and secondary voltage be allocated to the rate classes served by a particular voltage level "on the basis of each rate class' individual customer 12 monthly class peaks (Non-Coincident Peak)" (Exh. MECo-4, at 15). In developing its proposed distribution capacity (or demand) allocators, the Company first calculated the 12-month average of each class's monthly loads, then adjusted the results by the percentage of loads served at each distribution level, and further adjusted the results by the applicable loss multiplier at each level (Exh. MECo-4, exh. PTZ-3, at 7-8). The resulting loss-adjusted class average loads at each distribution level were used as the basis for determining the Company's proposed step-down transformer, secondary, and primary distribution demand allocators (id.).

Spencer, Charles W. and Ruth J. Maddigan, "On Customer Class Rate of Return Differentials," based on twenty-year data for 58 U.S. utilities).

2. Positions of the Parties

a. The Attorney General

The Attorney General opposes the Company's proposed distribution allocator and recommends that the Department direct the Company to use the class non-coincident peak ("NCP") allocator (Attorney General Brief at 98). The Attorney General claims that the Company did not use the data associated with class NCP and instead used the data associated with individual customer's maximum demands (id. at 98).[59]

The Attorney General advances several reasons why the use of the class NCP as an allocator for distribution related expenses is appropriate (id.). First, the Attorney General asserts that utilities size plant to meet the group peak of all of its customers (id.). Second, the Attorney General contends that the class NCP accounts for system cost savings from smaller customers' load diversity (id. at 98-99, citing D.P.U. 84-145-A at 76-77). The Attorney General claims that the Company's method is inferior to the class NCP allocator because it fails to capture the effect of class diversity of load (Attorney General Reply Brief at 41). Third, the Attorney General maintains that the use of class NCP allocator is consistent with the Department's Order in D.P.U. 92-78 (Attorney General Brief at 99, citing D.P.U. 92-78, at 154-155). The Attorney General adds that the Department has recently ordered the use of "customer class' maximum load" for allocating distribution costs other than bulk substations and therefore the class NCP is the current Department precedent for allocating distribution related costs (id., citing D.P.U. 92-250, at 184).

59 The Attorney General claims that the NARUC Electric Utility Cost Allocation Manual defines class NCP as the sum of diversified peaks of each class and contrasts NCP with the "summation of individual customer maximum demand" (Attorney General Brief at 98, citing Exh. AG-2, at 35 n.35, at 37 n.39).

The Attorney General concludes that the Company's allocator is theoretically incorrect, inconsistent with Department precedent, and therefore should be corrected in this case (id. at 99-100; Attorney General Reply Brief at 41).

The Attorney General also claims that the Company's distribution demand allocators for step-down transformers and for secondary lines do not properly reflect the diversity of equipment use by customer classes (Attorney General Brief at 100). In the case of the step-down transformer allocator, the Attorney General claims, for example, that such allocator "does not reflect the fact that larger customers use fewer transformers, while smaller customers share transformers in greater numbers" (id.). The Attorney General argues that since small customers' loads are diversified at the step-down transformer while large customers' loads are not, the Company allocated too large a share of the transformer capacity cost to the residential and other small customers by assuming that transformer capacity is proportional to customer maximum undiversified demand (Attorney General Reply Brief at 41). Therefore, the Attorney General recommends a "diversity-corrected allocator" to reflect transformer use characteristics by rate class (Attorney General Brief at 100, citing Exh. AG-2, at 40, exh. PLC-23; Attorney General Reply Brief at 41).[60]

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[60] In determining its proposed "diversity-corrected allocator" for step-down transformers, the Attorney General first estimated the number of customers per transformer for each rate class using engineering standards (Exh. AG-2, at 40, exhs. PLC-22, PLC-23; Tr. 15, at 137-139; RR-DPU-82). These estimates, together with the R-1/R-2 class coincidence factor of 0.55 and an average of eight customers per transformer, were used to interpolate the class "transformer coincidence factors" for the other rate classes (id.). Each class's sum of customers maximum demand was then multiplied by the class transformer coincidence factor and the results were used to develop the Attorney General's proposed diversity-corrected step-down transformer allocator (Exh. AG-2, exh. PLC-23).

The Attorney General disputes the Company's assertion regarding the relative effects on various rate classes of economies of scale in transformer size, claiming that the Company did not provide any evidence to support such an assertion (Attorney General Reply Brief at 41-42). The Attorney General argues that any economies of scale would be equally applicable to a large transformer serving many residential customers or to a large transformer serving a single commercial customer (id.).

Regarding the Company-proposed secondary lines allocator, the Attorney General claims that the Company assumed an average of three customers per line (id. citing Exh. AG-2, at 40). The Attorney General argues that "fewer of the larger G-1 and G-2 customers served from the secondary lines would tend to share secondary lines, none of the G-3 and G-4 customers would share these lines, and therefore, the residential share of the secondary allocation would decrease" (id. citing Exh. AG-2, at 40-41, exh. PLC-24). Therefore, the Attorney General recommends an allocator that would reflect diversity in equipment use of secondary lines (id. at 100).[61]

The Attorney General also claims that, although the Company does not propose to allocate secondary lines to G-3 and G-4 customers, a significant percentage of the G-3 and G-4 sales are to customers who receive neither the credit for metering at primary nor the credit for delivery at primary (id. at 101). The Attorney General contends that the Company's proposal to exempt G-3 and G-4 customers from secondary lines allocation would be correct only if all G-3 and G-4 customers take service directly from the transformers (id.). The Attorney General

[61] The Attorney General's proposed "diversity-corrected allocator" for secondary lines was calculated using the same procedure applied for determining its proposed diversity-corrected allocator for step-down transformer but using a coincidence factor of 0.559 and an average of three customers per secondary line for the R-1/R-2 rate class (Exh. AG-2, exh. PLC-24).

concludes that even if the Department does not adjust the allocator for secondary lines for diversity in equipment use, such allocator should be adjusted to reflect the G-3 and G-4 usage (id.).

b. The Energy Consortium

The Energy Consortium contends that the Company used the method approved by the Department in D.P.U. 92-78 for determining the distribution demand allocator (Energy Consortium Reply Brief at 3). The Energy Consortium recommends that the Department continue to use the method approved in D.P.U. 92-78 (id.). The Energy Consortium notes that the distribution demand allocator approved in D.PU. 92-78 was a change from the distribution allocator that was approved in D.P.U. 89-194/195 and D.P.U. 91-52 and the parties are entitled to reasoned consistency and that the Department should not change its method without good cause (id. at 4). Therefore, the Energy Consortium recommends that the Department approve a distribution allocator which is consistent with the method approved in D.P.U. 92-78 (id.). The Energy Consortium adds that in so doing the Department's goal of rate continuity and predictability can be accomplished (id.).

c. The Company

The Company states that its proposed distribution allocator is based on the sum of the peaks of individual customers whenever they occur in a given month (Company Brief at 92). The Company further states that the sum of individual customers' peaks within each rate class for each month is then averaged over the twelve-month test year period and the units determined are used to develop allocators at secondary distribution, transformer at step-down, and at primary distribution (id.). The Company notes that, because residential customers have individual peaks at different times throughout the day and therefore have more load diversity within the class than commercial and industrial customers, its proposed method would tend to allocate more distribution costs to residential customers than the method based on the non-coincident peak of the entire rate class (id. at 93).[62]

The Company maintains that although either approach is reasonable, the Department in D.P.U. 92-78 approved the method which is the basis for its proposal in this case (id. at 93). The Company asserts that its proposed method is consistent with the Department's directive in D.P.U. 92-78 (Company Reply Brief at 29-30). The Company concludes that since its proposed allocation is reasonable, such a method should be continued in this case (id.).

Regarding the Attorney General's proposed step-down transformer allocator, the Company claims that the Attorney General used engineering design criteria rather than the actual number of transformers on the system and arbitrarily adjusted transformer costs away from the residential customers (Company Brief at 94). The Company asserts that the Attorney General's proposed adjustments should be rejected because "[t]here is no evidence that the design allowance of eight residential customers per transformer is actually achieved in the system" (id.). The Company contends that such an adjustment ignores the economies of scale associated with the installation of larger transformers for larger customers noting that the cost per kilovolt-ampere of installed transformer drops dramatically with the size of the transformer (id. citing RR-TEC-5, Att. 1, at 2). The Company claims that its proposed allocator reflects "the lower costs of larger transformers for larger customers and the fact that many customers may be served with a smaller

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[62] The Company provided an alternative calculation for allocators based on the NCP for the entire rate class (Company Brief at 93, citing Exh. MECo-4, Workpaper PTZ-3, at 4, col. 13).

transformer" (id.). The Company concludes that its proposed allocator is superior to that of the Attorney General because it reflects a consideration of both diversity of demand and economies of scale (Company Reply Brief at 30).

Regarding the secondary lines distribution allocator, the Company maintains that G-3 and G-4 are connected to the primary system and that the Attorney General's proposed adjustment should be rejected (id. at 94-95). The Company states that the reason why some G-3 and G-4 customers do not receive a high voltage discount is that they do not own their transformer and they take service at the low-side of the Company-owned transformer (id. at 95). The Company reasons that although service is provided at the primary level, the discount as provided for in the tariff does not apply to these customers (id.). MECo claims that its engineering study for service drops and secondary connections indicates that no secondary cable is required when connecting G-3 and G-4 customers and therefore no secondary lines cost should be allocated to the G-3 and G-4 customers (id. citing Exh. TC-1-5, at 2, col. H).

3. Analysis and Findings

The Department in the past has approved the use of the class NCP allocator for distribution related costs in order to reflect the load diversity for each class of customers. D.P.U. 92-250, at 184; D.P.U. 89-114/90-331/91-80, at 234-235; D.P.U. 84-145-A at 76-77. The Department directed the Company to reflect class load diversity in developing distribution costs allocation. D.P.U. 92-78, at 154-155.

The Department notes that the method for developing the distribution allocator approved by the Department in D.P.U. 92-78 was characterized by the Company as an "allocated cost of service with non-coincident demand allocator" (Exh. MECo-14). A review of the Company's filing in this proceeding indicates that the data used by the Company are not the appropriate data associated with the definition of NCP which properly recognizes class load diversity. Based on the results of its load research, the Company used the sum of the individual customers' maximum demand to determine the class maximum demand. See Exhs. AG-4-1; MECo-4, exh. PTZ-3, at 8; Tr. 13, at 97-101. In addition, the Company has clarified that its proposed allocation is based on the peaks of individual customers whenever they occur in a given month (Company Brief at 92).

The record demonstrates that the Company's load research and sampling method showed deviations from the average class's per customer peak demand for a given hour which could also result in deviations from the overall class maximum load estimated (RR-DPU-70). However, the Department notes that individual customer's peaks could occur at different hours of the day and the Department is concerned that the load research data used by the Company in calculating its distribution allocators may not sufficiently capture each class' load diversity. Based on the record in this case, the Department finds that the Company's proposed distribution related allocator does not fully reflect class load diversity. Accordingly, the Department directs the Company in its compliance filing to this Order to revise its proposed distribution allocator and base such revised allocator on the annual NCP of the entire class.

Regarding the Attorney General's proposal to adjust the Company's step-down transformer allocator for diversity of equipment use, the record indicates that such proposed adjustments were based on engineering design criteria and numerical interpolations. Adopting such a method in this case, without sufficient record to validate those standards and estimates with verifiable data, could result in a distribution demand allocator that may not necessarily be an improvement over the Company's method. The Attorney General's proposed adjustment for diversity of equipment use for the Company's proposed secondary lines allocator is also unsupported by the record. In addition, the Department is not persuaded by the Attorney General's suggestion to adjust the secondary lines allocator to reflect the claimed G-3 and G-4 usage. Accordingly, the Department rejects the Attorney General's suggested adjustments to the Company-proposed step-down transformer and secondary lines allocators.

The Department, however, notes that the Attorney General has raised a legitimate issue. More specifically, the Department is concerned that the existing method for calculating these capacity allocators may not properly reflect each class's diversity of equipment use as well as economies of scale. Although such considerations may introduce added complexities in cost allocation, the Department needs to balance these factors with the principles of cost causation and fairness. Accordingly, the Department directs the Company to investigate more precise step-down transformer and secondary lines demand allocators and provide appropriate proposals in the next appropriate proceeding.

D. Customer Allocators

1. Allocation of Costs of the Power Quality Program and Load Research

a. The Company's Proposal

The Company included $567,729 in its proposed cost of service to represent the total cost of the power quality program provided to a total of 178 customers (Exhs. MECo-2, at 11; DPU-2-17). The Company included this cost in Account 908 (Customer Assistance Expenses) and proposed to allocate it to all rate classes in proportion to the number of customers ("customer allocator") in each rate class (Exhs. MECo-4, exh. PTZ-1R at 7; DPU-2-17). In addition, the Company proposed to allocate the cost of load research included in Account 908 based on the same customer allocator (Exh. MECo-4, exh. PTZ-1R at 7).

b. Positions of the Parties

i. The Attorney General

The Attorney General opposes the Company's proposed customer allocator for the costs of power quality program and of load research (Attorney General Brief at 101). The Attorney General asserts that these costs should be directly assigned to the customers who use or benefit from those services (id.). The Attorney General notes that, although there were very few residential customers who requested power quality assessment services, 89.5 percent of Account 908, a significant portion of which is comprised of the cost of the power quality program and load research, is allocated to the residential class (id.). The Attorney General asserts that since the costs of the power quality program and load research can be measured, it should be directly assigned to each class on the basis of cost causation (id.). Therefore, the Attorney General suggests an allocator for the cost of the power quality program based on the number of participants from each rate class (id. at 102, citing Exh. AG-2, at 31, exh. PLC-25, at 2). In addition, the Attorney General suggests an allocator for the cost of load research based on the number of requests for load research data from each rate class (id. at 102, citing Exh. AG-2, exh. PLC-25, at 2; RR-AG-30).

ii. Ms. Walton

Ms. Walton disagrees with the Company's proposed allocation noting that there were only three R-1 customers compared to 93 G-3/G-4 customers of the total of 178 customers who received service under the power quality program (Walton Brief at 5). She suggests that the cost of the power quality program "be allocated at the very least on the basis of number of customers in each rate class receiving the service" (id.).

iii. The Company

The Company agrees with the Attorney General and Ms. Walton with respect to the power quality program and states that it will revise its allocator in its compliance filing in this case accordingly (Company Brief at 95). The Company, however, disagrees with the Attorney General's proposal to allocate the cost of the load research program based on the number of load research requests from the customers of each rate class (id. at 96). The Company reasons that the "costs of load research are integral to an appropriate rate design, necessary for the implementation of DSM programs, and incurred for the benefit of all ... customers" of the Company (id.). The Company adds that specific load research plans are developed for each customer class with different samples drawn to assure statistical validity (id.).

c. Analysis and Findings

The Department requires direct assignment of costs when expenses attributable to each customer class are readily and accurately measurable. D.P.U. 93-60, at 345; D.P.U. 89-114/90-331/91-80, at 243. The record shows that the cost of the power quality program could be allocated to each rate class on the basis of the number of participants in that program. The Department finds in this case that such an allocation method is reasonable and consistent with Department precedent. The Department directs the Company, in its compliance filing, to allocate the cost of the power quality program consistent with this finding.

Based on the record, the Department is unable to conclude that the number of load research requests, as opposed to the total number of customers in each rate class, is a more appropriate basis for allocating the cost of load research. The Department notes the Company's assertion that its load research efforts provide benefit to all customers and that its load research objectives are attained through appropriate statistical sampling procedures. Therefore, allocating load research costs on the basis of participation may not be consistent with the cost allocation principles of cost causation and fairness. Accordingly, the Department rejects the Attorney General's suggested allocation method and accepts the Company's proposal.

2. Other Customer Allocators

a. The Company's Proposal

The Company proposed customer-related allocators for five Customer Expense Accounts (901 through 905) and for four accounts in Customer Service and Information Expenses (Accounts 907 through 910) following the method approved in D.P.U. 92-78 (Exh. MECo-4, exh. PTZ-1R at 7). For Accounts 901 (supervision), 903 (customer records and collections, and 905 (miscellaneous customer account expense), the Company proposed to allocate those costs based on the number of bills for each rate class (id.). For Accounts 907 through 910, the

Company proposed to allocate each of those accounts based on the number of customers (id.).[63] The Company also proposed to allocate Account 587 (customer installation expense) based on the number of customers (Exh. MECo-4, exh. PTZ-1R at 6). In addition, the Company proposed to use the service drop allocator for customer-related Accounts 369 (services), the meter investment allocator for Account 370 (meters), and the streetlight-specific allocator for Account 373 (streetlighting and signal) (Exh. MECo-4, exh. PTZ-1R at 9, 13, exh. PTZ-2, at 7).

b. Positions of the Parties

i. The Attorney General

The Attorney General claims that the Company uses an unweighted customer allocator for supervision (Accounts 901 and 907), customer records and collection (Account 903), miscellaneous (Accounts 905 and 910), information and customer service expense (Account 909), customer-related portion of distribution O&M (Accounts 369 (services), 370 (meters), and 373 (streetlighting and signal)), and installation expense on customer property (Account 587) (Attorney General Brief at 102). The Attorney General claims that "[n]one of these expenses appears to be directly proportional to the number of customers" and that the Company should be required to allocate those customer-related accounts "adjusting for the complicated installation, metering, and billing for large customers" (id.). The Attorney General adds that weighting should be incorporated in these allocators because the actual expenses in these accounts are more heavily weighted towards large customers (Attorney General Reply Brief at 42, citing Exh. AG-2, at

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63 The group of accounts referred to as Customer Service and Information Expenses includes supervision (Account 907), customer assistance expense (Account 908), information and instructional expense (Account 909), and miscellaneous customer service expense (Account 910).

44-46). Accordingly, the Attorney General recommends allocators for these accounts as shown in Exhibit AG-2, exhibits PLC-25, PLC-26, and PLC-27 (Attorney General Brief at 102; Attorney General Reply Brief 42-43).[64]

ii. The Company

The Company claims that the Attorney General's proposed modification is a new concept in cost allocation and that the Attorney General did not cite any prior case in which the Department has found that customer accounts and customer service expense vary by the amount of energy used rather than by the number of customers or bills (id.). The Company asserts that the Attorney General's proposal should be rejected by the Department because it has no logical basis and is inconsistent with cost causation principles (id.).

c. Analysis and Findings

The record indicates that the Attorney General's proposed allocators are based on a combination of several allocators in an attempt to account for what he characterized as the "complicated installation, metering, and billing for large customers." More specifically, the Attorney General proposed three sets of allocators: (1) an Accounts 902-904 allocator, which

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64 For Accounts 901, 903, and 905, the Attorney General proposed to allocate those costs based on the sum of Accounts 902, 903 and 904 or what the Attorney General referred to as "Account 902-904" allocator (Exh. AG-2, exh. PLC-25, at 1). For Accounts 907 through 910 (except for the costs of power quality programs and load research included in Account 908 as described above) the Attorney General proposed to allocate those costs based on the average of energy usage and number of customers or what the Attorney General referred to as "Average of Energy and Customers" allocator (Exh. AG-2, exh. PLC-25, at 2). In addition, the Attorney General proposed to take the average of the three allocators proposed by the Company for Accounts Account 369, 370, and 373 and use the resulting allocator to allocate the "customer-related portion of distribution O&M" (Exh. AG-2, at 45-46, exh. PLC-26; Exh. MECo-4, exh. PTZ-1R at 13, exh. PTZ-2, at 7).

combines three different allocators based on meter time, number of bills, and uncollectible revenues; (2) an Average Energy and Customers allocator, which combines energy usage and number of customers; and (3) an allocator proposed to allocate "customer-related portion of distribution O&M," which combines service drop costs, actual number of meters weighted by meter investments, and streetlight specific costs.[65]

The Department will continue to evaluate and consider changes in its method of cost allocation to the extent that those changes would advance the allocation principles of cost causation and fairness. Although accounting for customer size in allocating the above-described accounts might be appropriate, the Department is not persuaded that the above-described three sets of allocators proposed by the Attorney General would represent an improvement over the existing method and establish a more reasonable and accurate cost allocation. Accordingly, the Department rejects in this case the Attorney General's proposed allocators and accepts the Company's proposal.

E. Meter Investment Allocator

1. The Company's Proposal

The Company initially proposed to allocate meter investments based on the average number of customers per class weighted by the marginal meter investment cost for each rate class (Exh. MECo-4, exh. PTZ-1, at 9, exh. PTZ-3, at 14). During the proceeding, the Company

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65 Regarding Account 587, the Department notes that Mr. Chernick stated that such expense would tend to vary with the size of the customer and stated that unless the Company has a breakdown of costs by customer class or by other characteristics, such cost should be allocated on the basis of customer demand at primary distribution level (Exh. AG-2, at 46). Mr. Chernick added that a "further weighting towards large customers would be warranted, but is difficult to estimate" (id.).

revised its COSS by allocating meter investments based on the actual number of meters in service instead of the average number of customers (Exh. AG-6-6R2; RR-AG-11, Att. PTZ-1R at 9, Att. PTZ-3R at 14).

2. Positions of the Parties

a. The Attorney General

The Attorney General claims that the revised method of allocating meter investment is consistent with Department precedent and recommends that the Department adopt this revised allocator (Attorney General Brief at 105). The Company agrees with the Attorney General (Company Brief at 102).

3. Analysis and Findings

In D.P.U. 89-114/90-331/91-80, at 236-237, the Department indicated that where the number of customers in a given rate class does not match the number of meters, an allocator based on the number of customers may not provide an accurate method of allocation. See also, D.P.U. 92-78, at 162. The Department finds that the revised meter investment allocator, based on the actual number of meters for each rate class weighted by the class' marginal cost to install a meter, provides an appropriate and reasonable cost allocation for meter investments and is consistent with Department precedent. Accordingly, the Department accepts the Company's revised meter investment allocator as shown in Record Request AG-11, Attachment PTZ-1R at 9, and Attachment PTZ-3R at 14.

F. General Plant Allocators

1. The Company's Proposal

The Company proposed to allocate customer related general plant using a total customer

O&M expense allocator (Exh. MECo-4, exh. PTZ-1R at 13). This allocator is based on the sum of the allocated costs of O&M expense Accounts 901 through 905 and 907 through 910 (Exh. MECo-4, exh. PTZ-1R at 7).

2. Positions of the Parties

a. The Attorney General

The Attorney General claims that the general plant accounts (Accounts 390 through 398) contain items that are fundamental costs of doing business for an electric utility (Attorney General Brief at 106). The Attorney General asserts that the total costs of such plant items are not tied directly to a single operating function but are general overhead costs and therefore they should be allocated similarly to general and administrative ("G&A") expenses using a revenue requirement allocator (id.). The Attorney General claims that both Department precedent and cost causation principles require the allocation of general overhead expenses based on the revenue requirement (Attorney General Reply Brief at 45). The Attorney General concludes that all general plant should be allocated based on revenue requirement (id.).

b. The Company

The Company states that customer O&M expenses are allocated on a variety of measures based on the causes that give rise to those costs (Company Brief at 102). The Company asserts that the use of the overall customer O&M expense allocator to allocate customer related distribution plant is much more reasonable and precise than the revenue requirement allocator suggested by the Attorney General (id.).

3. Analysis and Findings

The Department has well-established precedent regarding the use of a revenue requirement allocator for general overhead G&A expenses and has identified those specific accounts which should be allocated on the basis of a revenue requirements allocator. See D.P.U. 93-60, at 346-347; Western Massachusetts Electric Company, D.P.U. 91-290, at 40 (1992); Commonwealth Gas Company, D.P.U. 91-60, at 29 (1991); D.P.U. 89-114/90-331/91-80, at 241. Consistent with Department precedent, the Company has proposed a revenue requirement allocator for those specific accounts previously identified.[66]

The record, however, in the instant proceeding indicates that the customer related general plant is basically in service to assist in the maintenance of plant distribution facilities to serve customers (Exhs. DPU-2-12; DPU-6-3; Tr. 9, at 36, 151). The Department finds that the Company's proposal, following the method approved by the Department in D.P.U. 92-78, is a reasonable method and is consistent with cost causation and fairness principles in cost allocation. Accordingly, the Department rejects the Attorney General's proposal.

G. Accounts 926 and 935

1. The Company's Proposal

In its proposed COSS, the Company functionalized into transmission, distribution, and customer related functions Accounts 926 (employees pension and benefits) and 935 (maintenance of general plant) based on payroll charges by MECo and NEP for those functions (Exh. MECo-4, exh. PTZ-2R at 2). The Company then allocated the functionalized costs based on O&M expenses (Exh. MECo-4, PTZ-1R at 8). The Company stated that its method separated G&A

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66 The Company proposed a revenue requirement allocator for Accounts 920 (G&A salaries), 921 (office supplies and expenses), 923 (outside services employed), 924 (property insurance), 925 (injuries and damages), 928 (regulatory commission expenses), 930 (general advertising and misc. expenses), 931 (rents) (Exh. MECo-4, exh. PTZ-1R at 8).

expenses into two categories: expenses incurred in the collection of all costs for MECo including purchased power expenses; and expenses incurred strictly on the retail side and allocated based on a revenue requirement allocator net of purchased power expenses (Tr. 9, at 51; Exh. MECo-4, exh. PTZ-1R at 8). The Company claimed that its method avoids double allocation and is consistent with the Department's directive in D.P.U. 92-78 (Tr. 9, at 51-53).

2. Positions of the Parties

a. The Attorney General

The Attorney General claims that, the Company, having functionalized G&A expenses into wholesale and retail and having included Accounts 926 and 935 in the wholesale category, allocated those two accounts based on an O&M allocator (Attorney General Brief at 107). The Attorney General claims that Department precedent has previously rejected an O&M allocator for G&A expenses and instead ordered the use of a revenue requirement allocator (id. at 107, citing Fitchburg Gas and Electric Light Company, D.P.U. 90-122, at 22-25 (1990)). The Attorney General asserts that these expenses are general overhead in nature and therefore should be functionalized on the retail side and allocated on class revenue requirements (id. at 107; Attorney General Reply Brief at 45). The Attorney General claims that the Department in D.P.U. 92-78 did not explicitly find that Accounts 926 and 935 should be functionalized on the wholesale side and allocated based on an O&M allocator (Attorney General Brief at 107; Attorney General Reply Brief at 45).

b. The Company

The Company claims that the Attorney General's suggestion is based on a misunderstanding of the Company's proposal (Company Brief at 102). The Company asserts that the functionalization of Accounts 926 and 935 is based on payroll for transmission, distribution and other functions, and not based on wholesale and retail revenues (id.). The Company claims that its proposed allocation is appropriate because the G&A expenses associated with pension and benefits expenses and maintenance of general plant are related to the charges of MECo and NEPSCo employees in the cost of service (id. at 102-103).

3. Analysis and Findings

The Attorney General has not demonstrated that his suggested approach would be a more appropriate allocation method. The Department finds the Company's proposal to be reasonable and consistent with the method developed by the Company in compliance with the Department's directive in D.P.U. 92-78. Accordingly, the Department rejects the Attorney General's suggested approach.

H. Service Extension Discount

1. The Company's Proposal

The Company's proposed G-3 rate includes a provision for a service extension discount ("SED") available to any G-3 customer who has signed a service agreement with the Company (Exh. MECo-4, exh. PTZ-18).[67] Such an agreement requires the customer to provide the Company five years prior written notice before purchasing electricity from other sources or installing a non-emergency generator for the customer's use (id.). The notice period can be shortened to three years provided the customer reimburses the Company 120 percent of all discounts received over the prior two years (id.).

[67] The proposed SED provision is similar to the SED provision of the Company's existing G-3 rate. See Exh. MECO-4, exh. PTZ-9.

The Company stated that it receives monthly payments from NEP for the discounts provided by MECo under its SED program (Exh. AG-2-12). The Company stated that NEP agreed to pay the cost of the discounts in the W-95(S) settlement agreement approved by FERC (id.). The Company noted that this W-95(S) settlement specifically provides that the reimbursement of the discount under the SED program is not included in MECo's cost of service (id.). The Company added that when it developed its normalized revenues for the G-3 rate class, the customers were billed the full G-3 tariffed rate without the discount, and correspondingly, the reimbursements from NEP for the SED program were not credited to the Company's other operating revenues (id.; Tr. 7, at 17).

2. Positions of the Parties

a. The Attorney General

The Attorney General recommends that the SED credit provided by NEP to MECo "should be allocated to all customer classes if the excess capacity costs are not allocated as recommended" (Attorney General Brief at 103).[68] The Attorney General claims that energy sales to industrial customers are uncertain, risky and volatile (id.). The Attorney General states that although the contracts associated with the SED would reduce risks of sales, those contracts would not eliminate the risks of serving the industrial loads (id.). The Attorney General contends that the risks of serving the G-3 customers who are not taking the SED would remain (id.). The Attorney General argues that since these non-SED G-3 customers impose costs on the system and are not paying for those costs, these customers are being subsidized by ratepayers in the other rate

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68 In Section VI.B, the Attorney General proposed to allocate excess capacity costs among rate classes considering the difference in risk of sales to those classes.

classes (id.; Attorney General Reply Brief at 43). Accordingly, the Attorney General suggests that the SED credit provided by NEP to MECo be allocated to all rate classes.[69]

b. The Energy Consortium

The Energy Consortium agrees with the Company that the SED payments are paid by NEP and are not being paid by any customers of NEP or MECo (Energy Consortium Reply Brief at 5). The Energy Consortium adds that since the G-3 rate class is being allocated its full cost of service, there is no basis to reallocate the credits received by MECo from NEP to pay for any SED discounts provided by MECo to its SED customers (id.).

c. The Company

The Company states that NEP, in its W-95(S) rate settlement, agreed to reimburse MECo for the SED payments to retail customers (Company Brief at 98). The Company notes that the costs associated with these reimbursements were excluded from NEP's rates and are being paid by its shareholders (id.). The Company claims that the Attorney General's proposal would require double payment, once when the discounts are paid to qualifying customers, and again when the reimbursement is allocated to the other customer classes (id.). The Company adds that the G-3 rate is being allocated its full cost of service in its COSS (id.).

3. Analysis and Findings

The record in this case shows that the discount provided to the G-3 customers under the SED program is being borne by the NEES shareholders through a reimbursement credit to MECo. Since the SED payment is not recovered through NEP's rates and the G-3 rate class is

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[69] In allocating the SED credit, the Attorney General suggests that the WHAMD is the most appropriate allocator because it is used to allocate power supply costs (Attorney General Brief at 103).

being allocated its full costs of service, the Department finds the Company's proposal in this case to be reasonable and appropriate. Accordingly, the Department rejects the Attorney General's proposed reallocation of the SED reimbursement.

I. Economic Development Rate Discount

1. The Company's Proposal

The Company proposed to recover from all rate classes $236,094 representing the test year level of economic development rate ("EDR") discounts provided to eligible customers under MECo's existing Jobs Through Conservation Program and Community Partnership Program (Exh. MECo-4, exhs. PTZ-1R at 12, PTZ-5).[70] More specifically, the Company reduced its "Other Operating Revenues" in its COSS by the above-stated EDR discount and allocated this amount among all rate classes in proportion to each class' allocated rate base (id., exh. PTZ-1, at 12).

The Jobs Through Conservation Program provides a ten percent discount over a 24-month period on a qualified customer's otherwise applicable base rate.[71] The Community

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[70] The Company's existing Jobs Through Conservation Program and Discount Provisions tariff (M.P.D.U. 890-A) ("Jobs Through Conservation Program") and Community Partnership Program Discount Provisions tariff (M.D.P.U. 891-A) ("Community Partnership Program") were filed by the Company in compliance with and approved by the Department pursuant to the Department's Order in Commonwealth Electric Company, D.P.U. 93-41, issued on August 31, 1993. See Department approval of the Company's compliance filing cover letter dated October 11, 1994. The original Jobs Through Conservation Program, approved in October 31, 1991, was implemented through individual contracts. See Department approval letter dated March 22, 1993, at 1 n.1. On April 1, 1993, the Department approved the implementation of the tariffs for Jobs Through Conservation Program and the Community Partnership Program. See Department approval dated April 1, 1993 of MECo's compliance filing cover letter dated March 31, 1993 pursuant to the Department's March 22, 1993 approval letter.

[71] A "qualified" customer for the Jobs Through Conservation Program is a new or expansion customer who meets a number of tariff-specified criteria including: (1) the availability of discount as a significant factor to locate or expand in the Company's service territory; (2) electricity is a significant portion of operating expenses; (3) availability of viable economic

Partnership Program provides a 30 percent discount over a 24-month period on a qualified customer's otherwise applicable base rate.[72]

2. Positions of the Parties

a. The Attorney General

The Attorney General asserts that EDR discounts should not be included in the cost of service according to Department precedent (Attorney General Brief at 104). The Attorney General notes that in Cambridge Electric Light Company, D.P.U. 93-42, at 2, 8 (1993), the Department found that the cost of revenue reductions associated with Cambridge's two experimental rates should be allocated to shareholders (Attorney General Brief at 104). The Attorney General also notes that the Department found that the discounts in Boston Edison Company's Manufacturing Retention Rate should not be paid by ratepayers (id.). The Attorney General, however, states that should the Department decide to include the EDR discounts in the cost of service, then it should be allocated using a class revenue requirement allocator (id.).

b. The Company

The Company states that the EDR discounts, implemented through Jobs Through

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alternatives to the Company's electric service; (4) ease in relocation; and (5) the expanded load is associated with additional or new use of existing, unused commercial or industrial space within MECo's service area. M.D.P.U. 890-A at 2-3.

72 A "qualified" customer for the Community Partnership Program is a new or expansion customer who takes or will take service from MECo at the G-3 or G-4 rate and who meets a number of other tariff-specified criteria including: (1) the availability of discount as a significant factor to locate or expand in the Company's service territory; (2) electricity is a significant portion of operating expenses; (3) availability of viable economic alternatives to the Company's electric service; (4) ease in relocation; and (5) the expanded load is at least 100 KW of demand or an average of 20,000 KWH per month over its base period consumption at a location within MECo's service area. M.D.P.U. 891-A at 2-3.

Conservation and Community Partnership programs, fully comply with the Department's Order in Commonwealth Electric Company, D.P.U. 93-41 (1993) (Company Brief at 101). The Company asserts that the associated costs in terms of the discount provided should be recovered in rates (id.). The Company claims that Cambridge Electric Light Company agreed not to seek recovery of a revenue loss and the Department accepted Cambridge's offer (id. at 100, citing D.P.U. 93-42, at 3, 8). MECo asserts that Cambridge's unilateral offer established no precedent (id. at 100).

3. Analysis and Findings

In Massachusetts Electric Company, D.P.U. 91-190-C at 5 (1992), the Department found that the appropriate forum to determine the ratemaking treatment for discounts provided under the Company's Jobs Through Conservation Program is in a general rate case proceeding where the costs and revenues associated with the program are known and measurable. In D.P.U. 93-41, the Department stated that it "reaffirms its precedent and continues to find it appropriate to determine the ratemaking treatment of the EDR in a base rate proceeding where the revenues and expense associated with the EDR are known and measurable in a test year." D.P.U. 93-41 at 35, citing D.P.U. 91-190-C at 5.[73]

In D.P.U. 93-41, at 9, the Department noted that several EDRs were filed for Department approval in the midst of a recessionary economy and a situation of excess capacity. In that Order, the Department noted that:

> [w]ith proper safeguards, the Department believes that the sale of excess capacity under EDR available for load that would not be served under a company's general rate schedule can benefit (1) the EDR customers, as part of an economic incentive package, (2) other ratepayers and (3) the utility, through additional contributions to fixed costs and the spreading of costs over a larger customer base .... Therefore, our primary goal in approving any EDR is to increase the overall contribution to a utility's fixed costs, which in turn may serve to delay the need for a base rate increase, and thereby benefit all ratepayers.

Id.

The Department notes that the discounts on the applicable base rates provided under the Jobs Through Conservation Program and Community Partnership Program apply only to qualified

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73 Similarly, in initially approving the implementation of the Company's Jobs Through Conservation Program and Community Partnership Program through tariffs, the Department did not address the issue of discount rate recovery. See Department letter of approval dated March 22, 1993, at 2.

new customers' load or additional loads of existing customers. The Department also notes that the discount would be provided for a limited period of 24 months. In initially approving these programs, the Department stated that the economic development rate "enhances state and local development programs and seeks to maximize the benefits of such a rate by offering a conservative discount on incremental load for a limited time period ...." (Department approval letter dated March 22, 1993, at 2).

The limited and temporary nature of these programs reflects the Company's response to the prevailing economic situation, the increasing influence of market forces in the electric utility business, and an attempt to increase capacity use under an excess capacity situation. The Department notes that such a limited and temporary nature of the programs provides the Company the needed flexibility to respond to the changing marketplace, taking into consideration its capacity situation and the benefits to ratepayers and shareholders. The Department also notes that the Company has the discretion to continue or stop the programs depending on the Company's continuing evaluation of their potential risks and returns.

The record shows that the Company estimated an incremental revenue, net of purchased power and marginal distribution costs, of $1.6 million for a total of 21 EDR customers out of a total revenue of $4.3 million for 1995 (RR-DPU-68). This incremental revenue benefits both ratepayers and shareholders consistent with the goals of EDRs as stated in D.P.U. 93-41. On balance, therefore, the Department finds it reasonable and appropriate that the Company's ratepayers should not bear an added cost of the EDR discount.

In making this finding, the Department further considered its primary goal of reducing costs through increasing competition as indicated in its recent Order in <u>Electric Industry</u>

Restructuring, D.P.U. 95-30. For example, the W-95(S) tariff settlement of NEP, in which NEP agreed to exclude from its rates the service extension discounts provided by MECo to its retail customers and bear the costs of such discounts, demonstrates an increasing level of competition. A policy that would allow the Company to recover the EDR discount from other ratepayers would be inconsistent with an evolving competitive marketplace and the Department's goal of increasing competition and expanding customer choices. Accordingly, the Department rejects the Company's proposal to recover the EDR discount from all rate classes. The Department directs the Company in its compliance filing to increase its Other Operating Revenues by $236,094.

J. Conclusion on Cost Allocation

Based on the foregoing cost allocation decisions, the Department directs the Company in its compliance filing to re-run its COSS in order to allocate among rate classes the overall base revenues approved in this case.

K. Interclass Revenue Allocation

In the past the Department has required companies to equalize class rates of return to the extent that the revenue shifts necessary to achieve this rate design goal do not violate the Department's goal of rate continuity. D.P.U. 92-111, at 318; D.P.U. 89-114/90-331/91-80, at 251-252; D.P.U. 86-280-A at 151; D.P.U. 85-266-A/85-271-A, at 193. As noted in Section VI.A. above, the Company's proposed revenue requirement for each rate class is based on equalized rates of return (Exh. MECo-4, exh. PTZ-1R).

Based on its cost allocation decisions in this case, the Department is concerned that the resulting rates based on equalized rates of return may, for some rate classes, violate the Department's goal of rate continuity. Accordingly, the Department directs the Company in its compliance filing to cap the revenue requirement percentage increase for any rate class at twice the Company's overall percentage increase on base revenues.

The Department has traditionally allocated interclass revenue deficiencies on the basis of a rate base allocator because this preserves equitable contribution to rate of return across all rate classes. D.P.U. 92-111, at 319; D.P.U. 91-60, at 41-42; D.P.U. 89-114/90-331/91-80, at 252; Colonial Gas Company, D.P.U. 90-90, at 33-34 (1990). Accordingly, the Department directs the Company to allocate the unrecovered revenues resulting from the capping of the revenue requirement increase at twice the the overall base revenue increase, to the other rate classes in proportion to each of the remaining rate class's rate base to the total rate base for the remaining rate classes.

VII. RATE DESIGN

A. Rate-Design Goals

In order to promote the Department's goals for rate structure, rate design must satisfy two objectives. First, it should produce a set of rates for each rate class that generates revenues covering the cost of serving that class. Second, rate design should be based on a marginal cost analysis. Economic theory indicates that marginal cost-based prices tend to lead to an efficient allocation of scarce societal resources. D.P.U. 93-60, at 367-368.

There are four tasks involved in setting rates based on marginal costs. First, a marginal cost study that accurately determines a company's marginal costs must be performed. Second, marginal costs must be converted into rates for each rate class. Third, the rates set at marginal cost should be reconciled with the class revenue requirement by adjusting the most demand-inelastic portion of the rate. Fourth, the resulting rate structure must be compared with the existing rates. If marginal cost-based rates are found to represent a change that violates the goal of rate continuity for customers within each rate class, then the existing rate must be adjusted accordingly. The Department will evaluate the Company's proposed rate design in light of these four tasks. D.P.U. 92-78, at 163-164; Western Massachusetts Electric Company, D.P.U. 91-290, at 44-45 (1992).

B. Marginal Cost Study

1. Description

The proposed marginal cost study ("MCS") was updated by the Company to reflect NEPCo's present Rate W-95(S), test year units and allocations, and marginal costs for levels in 1995 (Exh. MECo-4, at 19, exhs. PTZ-7, PTZ-8, PTZ-19, PTZ-21).[74]

To determine the marginal distribution costs, which reflect those costs that are incurred to serve increased load, the Company developed an Operation and Maintenance/General and Administrative ("O&M/G&A") load factor of 9.97 percent (Exh. MECo-4, exh. PTZ-8, at 4). In developing this load factor, the Company removed the distribution expenses booked to Account 588 (miscellaneous distribution expenses), and Account 598 (miscellaneous distribution maintenance), because it asserts these expenses are not related to serving increased load (Exh. AG-4-4).

[74] The MCS proposed by the Company uses the method approved by the Department in D.P.U. 92-78, at 164-168.

2. Positions of the Parties

a. The Attorney General

The Attorney General argues that the Company has not determined what portion of the distribution expenses booked to Account 588 and Account 598, if any, are demand related; therefore, it should include all of the amounts in their MCS (Attorney General Brief at 109-110; Attorney General Reply Brief at 47). This would increase the O&M/G&A load factor to 11.2 percent (id.).

b. The Company

The Company agrees with the Attorney General that the distribution expenses booked to Account 588 and 598 should be included in the O&M/G&A load factor that is used to determine the marginal distribution costs. Accordingly, the Company states that it shall include them in future analyses (Company Brief at 104).

3. Analysis and Findings

The Company has not demonstrated what portion of expenses booked to Accounts 588 and 598 are not related to serving increased load (Exh. MECo-4, exh. PTZ-8; Exh. AG-4-4). In addition, both the Attorney General and the Company state that these expenses should be included in future analyses. Therefore, the Department directs the Company to include in its compliance filing all expenses booked to account 588 and 598 in the O&M/G&A load factor, and to include this information in each future MCS.

C. Rate-by-Rate Analysis

1. Introduction

The following rate-by-rate analysis evaluates the specific rates proposed by the Company and provides the Company with direction for setting its rates in the compliance filing. This Section includes Department findings for the customer charge, demand charge, and energy rates.[75]

2. Residential Rate R-1

a. The Company's Proposal

Rate R-1 is available to all residential customers for domestic purposes in an individual private dwelling and an individual apartment, and for church and farm purposes (Exh. MECo-4, exh. PTZ-18). For rate continuity purposes, the Company proposed an equi-proportional increase in the customer charge and energy charge for residential customers in the R-1 class (id. at 24).

b. Positions of the Parties

i. The Attorney General

The Attorney General states that the combination of the increase proposed in the instant case and the increase approved in D.P.U. 92-78, would result in R-1 customers receiving on average a 30 percent increase to their base rates (Attorney General Brief at 107-109; Attorney General Reply Brief at 46-47). Therefore, the Attorney General contends that this type of increase violates the Department's goal of rate continuity and, therefore, should not be allowed (id.).

ii. The Company

The Company maintains that its cost allocation and proposed increases follow Department precedent and, therefore, should be found to be reasonable (Company Brief at 103).

c. Analysis and Findings

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[75] The monthly charges for all rate classes may be adjusted for the Company's cost of purchased power, conservation and load management, conservation services, and fuel.

According to the Company's MCS, the Rate R-1 marginal energy charge is $0.04286 per KWH and the marginal customer charge is $7.99 per month (Exh MECo-4, exh. PTZ-7, exh. PTZ-21). In addition to reviewing the MCS, the Department has performed an analysis of the impacts on monthly customer bills from the increase in class revenue for Rate R-1. An increase in the customer charge from its current rate of $6.32 per month (Exh. MECo-4, exh. PTZ-9) to the marginal rate of $7.99 per month, would violate the Department's goal of rate continuity. The Department finds that a customer charge of $6.45 per month provides an appropriate balance between the Department's rate continuity goal and marginal costs. Therefore, the Rate R-1 customer charge shall be set at $6.45 per month and the Company is directed to recover the remaining class revenue requirement from the energy charge.

3. Residential Low-Income Rate R-2

a. The Company's Proposal

Rate R-2 is a discounted rate available for all domestic uses in individual private dwellings to qualified customers who receive Supplemental Security Income, Aid to Families with Dependent Children ("AFDC"), Medicaid, Food Stamps, General Relief, Low-Income Heating Energy Assistance Program ("LIHEAP") from a certified Community Action Program Agency, or Veterans' Service Benefits (Exh. MECo-4, exh. PTZ-18). The Company proposed to maintain its low-income rate, R-2, at its present level, and accordingly, proposes no increase to the base rate charges for this rate class (id. at 24).

b. Positions of the Parties

i. The Low-Income Intervenors

The Low-Income Intervenors assert that the Department should eliminate or reduce the customer charge in the existing R-2 rate and limit the energy charge increase to the rate of increase in maximum income under the AFDC program (Low-Income Intervenors Brief at 9; Low-Income Intervenors Reply Brief at 2-5). The Low-Income Intervenors state that eliminating the customer charge, which is the most inelastic component of the bill, will provide improvement in access to affordable electric service, while only increasing the low-income shortfall by a little over $225,000 at current participation rates (id.).

Also, the Low-Income Intervenors state that the Department should eliminate the bad-check fee and reconnection fee for low-income customers (Low-Income Intervenors Brief at 12; Low-Income Intervenors Reply Brief at 5-6). According to the Low-Income Intervenors, additional charges would not make a bill affordable that was already unaffordable (id.). Instead, this would increase the sense of futility that low-income customers experience trying to pay their bills (id.).

In addition to the recommended tariff changes, the Low-Income Intervenors assert that the Company should promote the Federal Earned Income Tax Credit ("FEITC")[76] to its lower income customers and improve its Demand-Side Management ("DSM") programs that are available to low-income customers (Low-Income Intervenors Brief at 3, 17-29; Low-Income Intervenors Reply Brief at 10-13). The Low-Income Intervenors contend that some of the money gained by low-income customers through the FEITC may be used to offset electric bills (id.).

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76 The FEITC is a refundable tax credit for low-income people who work. For tax year 1994 working families with one child that had income less than $23,755 could be eligible for a credit of up to $2,038 (Exh. Low-Income Intervenors-2, at 51-52). Families with more than one child that had income less than $25,296 could be eligible for a credit of up to $2,528 (id.). Workers without children that had income less than $9,000 could be eligible for a credit of up to $306 (id.).

Lastly, in light of industry restructuring and incentive ratemaking, the Low-Income Intervenors suggest working with the Company in a collaborative effort to preserve existing protection for low-income families (Low-Income Intervenors Brief at 33-34; Low-Income Intervenors Reply Brief at 14).

ii. The Attorney General

The Attorney General states that the Department should defer ruling on the specific ratemaking measures recommended by the Low-Income Intervenors (Attorney General Brief at 117). Instead, the Department should order the Company to initiate efforts to protect the interests of low-income consumers, such as collaboratives, and to reduce the R-2 energy charge to a level more consistent with the current energy market (id.) .

iii. Conservation Law Foundation

CLF agrees with the Low-Income Intervenors that a collaborative should be formed to discuss low-income DSM program design and delivery in light of industry restructuring (CLF Brief at 19).

iv. The Company

According to the Company, the Low-Income Intervenors suggestion to eliminate the customer charge would increase the low-income subsidy by $2.7 million. MECo states that in times when all customers are facing intense economic pressures, further subsidies are not appropriate. Therefore, the Company argues that the Low-Income Intervenors suggestions on eliminating the customer charge should be rejected (Company Brief at 109).

The Company states that the returned check fee is applicable only where the check has been dishonored after being deposited a second time (id. at 10). In addition, the Company states that the returned check fee is fully cost justified and should be allowed (id.).

With regard to the reconnection fee, the Company contends that in those cases where terminations occur, a modest reconnection charge is appropriate and necessary to encourage customers to avoid disconnections in the first instance (id.).

Also, the Company states that the implementation of an outreach program for the FEITC, as suggested by the Low-Income Intervenors, would not require Department approval in this proceeding (id. at 108). Lastly, the Company agrees with the Low-Income Intervenors and the CLF that a collaborative should be formed to address low-income customers' rate design and DSM in a restructured electric industry (id. at 110-112).

c. Analysis and Findings

The record shows that eliminating the Rate R-2 customer charge would increase the low-income subsidy by $2.7 million (Exh. MECo-4, exh. PTZ-11, at 2).[77] In addition, the Company's proposal to maintain Rate R-2 at its current level by not increasing the base rate charges will in effect increase the low income discount above the 35 percent threshold approved by the Department in the Company's last rate case. D.P.U. 92-78, at 175-176. As a result, the elimination of the customer charge as proposed by the Low-Income Intervenors, and the Company's proposal to maintain the Rate R-2 base rate charges at the current level, would lead to an increase in the total low-income subsidy amount which is to be recovered from the remaining rate classes. The Department finds that in view of our decision to cap the revenue increase to rate classes at twice the overall base revenue increase because of continuity concerns, the elimination

[77] The product of $4.11 Rate R-2 customer charge and 668,509 test-year R-2 bills yields a potential subsidy of $2,747,572.

of the Rate R-2 customer charge and an increase in the low-income discount is not appropriate. We direct the Company to set the customer charge and energy charge of Rate R-2 at a level equal to 65 percent of the Rate R-1 customer and energy charge approved by the Department in this case.

Regarding the returned check fee, the record demonstrates that the fee is fully cost justified. In addition, because the Company incurs bank and administrative costs, the elimination of the fee for low income customers would increase costs to the Company's other ratepayers. Accordingly, the Department rejects the Low-Income Intervenors' suggestion to eliminate the returned check fee for low-income customers.

With respect to reconnection, the Department finds that the reconnection fee is fully cost justified (Exh. LII-1-2). Further, the reconnection fee may encourage customers to avoid disconnection by working out a payment plan with the Company. However, in certain cases, for example, where service has been terminated in error or the Company refuses a payment arrangement later found by the Department to be reasonable, no reconnection fee should be applied. Accordingly, the Department rejects the Low-Income Intervenors' suggestion to eliminate the reconnection fee for all low-income customers.

There is no evidence on the record to support the Low-Income Intervenors' assertion that some of the money low-income customers would collect through the FEITC would be used to offset electric bills. Since there is no indication that notification of the FEITC would provide direct benefits to the Company or its other customers, the Department finds that a mandatory outreach program for FEITC would be inappropriate. Therefore, the Department rejects the Low-Income Intervenors' suggestion that the Company should be ordered to promote the FEITC to its low-income customers.[78]

With regard to the Company's DSM programs, the Department finds that the IRP process, not this proceeding, is the appropriate forum in which to address these programs. Lastly, in light of industry restructuring and incentive rate making, the Department encourages parties to work with the Company in a collaborative to preserve existing protections for low-income families. See D.P.U. 95-30, at 19, 25.

4. Residential Time-of-Use Rate R-4

a. The Company's Proposal

The Company proposed to change Time-of-Use ("TOU") Rate R-4 from mandatory for residential customers whose annual usage exceeds 30,000 KWH to optional for customers for this size usage, because customers have complained about the mandatory aspect of the rate despite its benefits (Exh. MECo-4, at 24). The Company proposed to design Rate R-4 by decreasing the on-peak and off-peak energy charges proportionately and collecting the remaining cost of service through the customer charge (id. at 25).

b. Positions of the Parties

i. The Attorney General

The Attorney General argues that the minimum usage threshold restriction should be rejected, because allowing more customers on the TOU rate would provide greater cost savings to the system by causing more customers to switch usage from the peak hours to the off-peak hours of the day (Attorney General Brief at 113-115). The Attorney General contends that the Company can do this without causing substantial revenue erosion (id.).

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78 The Department notes that some utilities send notices to customers about the FEITC.

ii. Ms. Walton

Ms. Walton argues that the threshold restriction should be rejected for the same reasons as stated by the Attorney General (Walton Brief at 3-4). In addition, Ms. Walton asserts that the R-4 customer charge should be lower because the G-2 meter is about five times the cost of the R-4 meter, whereas, the G-2 customer charge is only one and one-half times as great (id.).

iii. The Company

According to the Company, the break-even point for customers shifting from Rate R-1 to Rate R-4 is 879 KWH (Company Brief at 106). If all these customers switched to Rate R-4, then the revenue loss to MECo would be $14.0 million per year, over and above the $1.4 million revenue loss that may occur under the Company's proposal (id.). Also, the Company states that the limit on availability helps maintain the stability of rates (id.). In conclusion, the Company asserts that the Department has one of three options: (1) adopt the Company's proposal; (2) design Rate R-4 based on a consolidated cost allocation with Rate R-1; or (3) eliminate the availability limitation and recover the lost revenue through the fuel charge (id. at 106-107).

c. Analysis and Findings

Eliminating the R-4 threshold restriction would allow greater access to the TOU rate, which, by switching usage from the on-peak hours to the off-peak hours of the day, may provide greater cost savings to the system. However, opening the R-4 rate to all R-1 customers would cause a change to the cost to serve the R-4 class (Exhs. DPU-9-4; AG-2-11). The R-4 rate would need to be designed based on the cost to serve R-1 and R-4, with a higher customer charge for Rate R-4 to cover the cost of the more expensive meter. See Western Massachusetts Electric Company, D.P.U. 91-290, at 55 (1992). Since the embedded cost of energy and demand is higher for the R-1 class than the R-4 class ($.06466 per KWH for R-1 compared to $.05145 per KWH for R-4), the TOU rate designed using a consolidated cost to serve would be higher than preserving two separate classes (Exh. DPU-9-4, Att. 1, at 1), and the current R-4 customers would end up paying more than the cost to serve them. This would violate the Department's efficiency and fairness goals.

With respect to the Company's suggestion that the Department allow the Company to recover lost revenue through the fuel charge, the Department has stated:

> In setting base rates, the Department does not ensure dollar-for-dollar recovery by the Company of its costs and expected profits. Rather, rates reflect a representative level of expenses and a reasonable opportunity to earn the allowed return. Western Massachusetts Electric Company, D.P.U. 85-270, p. 194 (1986). Accordingly, the Department denies the Company's request to reconcile in the fuel clause any revenue amount from the optional TOU rates that is less than or greater than that which base rates set in this docket are designed to recover.

D.P.U. 91-290, at 76 (1992). The Company's proposal to recover lost revenue through the fuel charge is not consistent with Department precedent. Because it is not consistent with Department precedent and violates the Department's fairness goal, the Company's proposal to recover lost revenue through the fuel charge is rejected. Although the Department has rejected eliminating the threshold restriction for Rate R-4, 30,000 KWH per year may not be the most appropriate threshold limit. Therefore, the Department directs the Company in its next rate case to analyze alternatives to the 30,000 KWH threshold level or to demonstrate the reasonableness and cost-effectiveness of maintaining the threshold limit at its current level.

According to the Company's MCS, the Rate R-4 marginal energy costs are $0.09331 per KWH on-peak and $0.00564 per KWH off-peak, and the marginal customer charge is $14.94 per month (Exh. MECo-4, exh PTZ-7, exh. PTZ-21). In addition to reviewing the MCS, the

Department has performed an analysis of the impacts on monthly customer bills from the increase in class revenue for Rate R-4.

Rate R-4's current customer charge of $19.93 per month (Exh. MECo-4, exh. PTZ-9) is already above marginal cost. The Department finds that decreasing the customer charge to the marginal customer charge would violate the Department's rate continuity goal. Consequently, the Department finds that spreading the rate increase evenly across all R-4 customers would provide the most appropriate charges consistent with the Department's rate continuity and fairness goals. The Department finds that this is achieved by increasing the current on-peak and off-peak energy charges by the R-4 class' overall percentage base rate increase and collecting the remaining revenue through the customer charge. Therefore, the Department finds that the Company shall increase the Rate R-4 on-peak and off-peak energy charges by the R-4 class' overall percentage base rate increase and is directed to recover the remaining class revenue requirement through the customer charge.

5. General Service - Small C&I Rate G-1

a. The Company's Proposal

Rate G-1 is an energy-only rate available for all small general service customers whose average monthly loads are below 10,000 KWH per month or 200 KW of demand for three consecutive months (Exh. MECo-4, exh. PTZ-18). The Company proposed to increase the customer, unmetered service, and energy charges proportionately with the cost of service increase for this class (id. at 26).

b. Analysis and Findings

According to the Company's MCS, the Rate G-1 marginal energy charge is $0.05000 per

KWH and the marginal customer charge is $12.86 per month (Exh. MECo-4, exhs. PTZ-7, PTZ-21). In addition to reviewing the MCS, the Department has performed an analysis of the impacts on monthly customer bills from the increase in class revenue for Rate G-1. An increase in the customer charge from its current rate of $8.87 per month (Exh. MECo-4, exh. PTZ-9) to the marginal rate of $12.86 per month would violate the Department's goal of rate continuity. The Department finds that a customer charge of $9.25 per month provides an appropriate balance between the Department's rate continuity goal and marginal costs. Therefore, the Department finds that the Rate G-1 customer charge shall be set at $9.25 per month and the unmetered service charge shall be set at $7.10 per month. The Company is directed to recover the remaining class revenue requirement from the energy charge.

6. General Service - Demand Rate G-2

a. The Company's Proposal

Rate G-2 is a mandatory demand metered non-TOU rate generally serving medium-sized general service customers with usage above 10,000 KWH and average monthly demand of 200 KW or less (Exh. MECo-4, exh. PTZ-18). For Rate G-2, the Company proposed to increase the energy and demand rates proportionately, and use the customer charge to recover the remaining class revenue requirement for Rates G-2 and G-1 (id. at 26).

b. Analysis and Findings

According to the Company's MCS, the Rate G-2 marginal energy charge is $0.01080 per KWH, the marginal demand charge is $16.44 per KW, and the marginal customer charge is $28.06 per month (Exh. MECo-4, exhs. PTZ-7, PTZ-21). In addition to reviewing the MCS, the Department has performed an analysis of the impacts on monthly customer bills from the increase in class revenue for Rate G-2. An increase in the demand charge from its current rate of $9.49 per KW per month (Exh. MECo-4, exh. PTZ-9) to its marginal rate of $16.44 per KW per month would violate the Department's goal of rate continuity. The Department finds that increasing the energy charge and demand charge by the G-2 class' overall percentage base rate increase provides an appropriate balance between the Department's rate continuity goal and marginal costs. Therefore, the Department finds that the Company should increase the Rate G-2 energy charge and demand charge shall be increased by the class' overall percentage base rate increase, and we direct the Company to recover the remaining class revenue requirement from the customer charge.

7. Time-of-Use Rates G-3 and G-4

a. The Company's Proposal

Currently, Rate G-3 is a mandatory TOU rate for all uses of electricity by customers whose metered demands exceed 500 KW (Exh. MECo-4, exh. PTZ-18). Rate G-4 is the same as Rate G-3 except it is for customers whose metered demands are between 200 KW and 500 KW (id.). Because price differences caused by having two independent rate classes are not supported by the Company's costs, the Company proposed to consolidate Rate G-4 into Rate G-3 (id. at 26-27). Also, the Company proposed to set the customer charge at marginal costs, keep the demand charge at its present G-3 level of $9.45 per KW per month, and collect the remaining class revenue requirement through the energy charges, keeping the on-peak and off-peak rate proportional to current levels (id.).

The record shows that the embedded cost to serve Rate G-3 under the Company's proposed revenue increase is $0.07164 per KWH and to serve Rate G-4 is $0.07778 per KWH

(RR-DPU-34, at 1). Also, the marginal customer cost for Rate G-3, of $80.14 per month, is the same as the marginal customer cost for Rate G-4 (RR-DPU-35). The marginal power demand cost for Rates G-3 and G-4 are $6.25 per KW per month and $5.80 KW per month, respectively (Exh. MECo-4, exh. PTZ-7 at 4). Finally, the marginal energy cost is $0.01574 and $0.01579 per KWH on-peak, respectively, and 0.00441 and $0.00462 per KWH off-peak, respectively (id.).

b. Positions of the Parties

i. The Energy Consortium

The Energy Consortium states that the Department should keep in focus that over the last five years MECo's average overall rates compared to the national average, have increased from 117 percent in 1990 to 130 percent in 1994, and industrial rates have increased from 145 percent in 1990 to 160 percent in 1994 (Energy Consortium Brief at 3). The Energy Consortium also argues that the Department should decrease the regulatory burden and social programs mandated on utilities (id. at 4).

c. Analysis and Findings

The embedded and marginal costs of Rate G-4 are similar to Rate G-3. In addition, combining these two rates conforms to the Department's simplicity goal and does not produce adverse bill impacts. Therefore, the Department finds that combining Rate G-4 with Rate G-3 is acceptable.

The Department finds that keeping the demand charge at its current level, increasing the customer charge to $75.00 and increasing the on-peak and off-peak energy charges by the same percentage over current rates provides an appropriate balance between the Department's rate continuity goal and marginal costs. Therefore, the Department finds that the Rate G-3 demand charge shall be set at $9.45 per KW per month, the customer charge at $75.00 per month, and the Company is directed to collect the remaining class revenue requirement through the on-peak and off-peak energy charge, increasing each by the same percentage over current rates.

8. Experimental Real Time Pricing Rate G-5

a. The Company's Proposal

Rate G-5 is an experimental rate that is proposed by MECo to be available only to a limited number of customers that will be selected by the Company from customers who would otherwise take service under Rate G-3 (Exh. MECo-4, exh. PTZ-18). The Company proposed to offer the rate to its largest manufacturing, computer, and biotechnology customers (Exh. MECo-4, at 30). Currently, under Rate G-5, the Company sends a price schedule to a customer for the next day's usage, which contains 24 hourly prices that vary according to the level of Company demand expected in each hour (id. at 28). MECo proposed to simplify Rate G-5 by reducing the number of price schedules in each season from twelve to four (id. at 28-29). The Company asserted that this change will facilitate customer understanding while collecting the appropriate demand costs incurred during each peak hour (id. at 28).

MECo has attracted just two customers onto Rate G-5, even though the rate has been presented in detail to more than 20 customers (id. at 30). To encourage participation, the Company has proposed a Rate G-5 discount (id.). To be eligible for the discount, the customer must make a minimum purchase commitment for five additional years (id.). The following table summarizes the minimum commitment level and corresponding incentive discount off base rates:

Commitment Level (GWH per Year)	Incentive (Off Base Rates)
25	5.0 %
50	7.5 %
75	10.0 %
100	12.5 %

Under the Company's proposed incentive discount plan, a customer would agree to parallel billing on Rate G-3 and Rate G-5 for the first two years of the agreement, but would have the right to shift to Rate G-5 thereafter (id. at 31). The customer would receive a G-3 bill less the discount amount and a parallel G-5 bill every month (id.). After one year on parallel billing, MECo proposes to compare the actual annual G-3 bill, less the discount, to the parallel Rate G-5 bill (id.). If the annual G-5 bill is less than the annual bill on Rate G-3 with the discount, the customer shall receive a credit on the following month's bill for the difference (id. at 32).

To recover the dollars associated with the Rate G-5 discount, the Company proposed to include a separate factor billed quarterly through the fuel adjustment factor (id. at 33). The

Company claimed that the participation of large industrial customers on Rate G-5 produces direct savings to all of MECo's customers through reduced purchase power expense and future resource needs, and, therefore, is appropriately recovered through the fuel charge (id.). Also, MECo proposed to return any additional revenues collected from the Rate G-5 minimum commitment as a credit through the fuel charge (id.).

b. Positions of the Parties

i. Conservation Law Foundation

CLF states that the Company should not limit its experience with real-time pricing to large industrial customers, but should concurrently explore real-time pricing options for smaller commercial and industrial, and residential ratepayers as well (CLF Brief at 11-16). CLF maintains that by limiting participation on Rate G-5, the Company will miss the opportunity to learn valuable lessons about how individual or bundled groups of residential, smaller commercial, or industrial customers respond to real-time pricing (id.).

ii. The Attorney General

According to the Attorney General, Rate G-5 should be designed to recover fully all embedded costs associated with the service for existing customers, and the customer charge should be high enough to recover a marginal customer cost of $168.00 (Attorney General Brief at 110-113).

iii. Ms. Walton

Ms. Walton agrees with CLF that Rate G-5 should be made available to more customers (Walton Brief at 2-3). In addition, Ms. Walton states that MECo's shareholders should bear the costs associated with the Rate G-5 discount, instead of passing them through the fuel charge (id.).

Ms. Walton contends that this would be consistent with the Department's ruling on BECo's Manufacturing Retention Rate (id.).[79]

iv. The Energy Consortium

According to the Energy Consortium, Rate G-5 should be expanded to offer the discount to any customer that agrees to the minimum usage commitment to avoid discriminatory treatment of similarly situated customers (Energy Consortium Brief at 6-8). Also, the Energy Consortium argues that the incentive discount, which requires an additional five-year commitment that is added to the five-year service extension commitment, should not be tied to the required execution of the service extension discount (id.). The Energy Consortium contends that this would make the customer's commitment for minimum usage of five years and the utility's discounts comparable (id.).

Lastly, the Energy Consortium states that the Department should reject the Company's proposal to collect costs associated with the Rate G-5 discount through the fuel charge (id.). The Energy Consortium maintains that this would be contrary to Department policy set forth under BECo's Manufacturing Retention Rate and a voluntary discount granted by Cambridge Electric Light Company to Harvard University (id. at 8-9).

v. The Company

The Company states that it does not object to the Attorney General's assertion that it should develop a minimum marginally cost based customer charge for Rate G-5 (Company Brief at 104). However, the Company states that this could impede efforts to extend the rate to smaller

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[79] In approving BECo's Manufacturing Rate on February 28, 1995, the Department stated that BECo is precluded from recovering any costs associated with a discount from its other ratepayers.

commercial and industrial customers (id.).

The Company agrees with the other parties that Rate G-5 should be made available to more customers (id. at 105). MECo is willing to work with the other parties to develop such a proposal (id.). However, at this particular time, the Company states that such a proposal is not ready for filing (id.).

c. Analysis and Findings

The Company states that the pricing under G-5 is experimental and represents a significant step toward pricing electricity as a commodity. The hourly energy prices and elimination of the generation related demand charge give customers and the Company significant additional flexibility to manage costs and loads. Broader implementation of this flexible rate allows both the Company and participating customers to measure price elasticities, evaluate load reductions, and adjust usage and prices to make sure that commodity pricing maximizes benefits for customers and the Company (Exh. MECo-1 at 22-23). Also, the Company states that the commodity pricing provided by Rate G-5 will better enable the Company to make effective and intelligent decisions in the retail market (id.).

Under its terms, the G-5 rate is optional to G-3 customers. In addition, since the G-5 rate is MECo's experiment to gain experience in the retail market, the Department finds that the details of the rate proposed by MECo shall be allowed, as long as ratepayers are held harmless. Accordingly, the Department finds the Company's proposal to limit the availability of Rate G-5, and to tie the incentive discount to the required execution of the service extension discount to be acceptable.

Both the Attorney General and the Company state that the G-5 customer charge should be set at the marginal customer cost at a minimum. This is consistent with Department precedent. Boston Gas Company, D.P.U. 92-259, at. 85-86 (1993); D.P.U. 92-78, at 163-164. Therefore, the Department orders the Company to set the G-5 customer charge at marginal cost.

The Company's proposal to recover the G-5 discount through the fuel charge, is contrary to Department policy on the rate recovery of a voluntary discount. D.P.U. 91-290, at 76; Letter Order dated May 11, 1994 approving a contract between Cambridge Electric Light Company and Harvard University, and Letter Order approving BECo's Manufacturing Retention Rate, dated February 28, 1995. MECo has failed to establish that the Department should depart from precedent. Accordingly, the Department rejects the Company's proposal to collect the G-5 discount through the fuel charge.

9. Outdoor Lighting Rates S-1, S-2, S-3, and S-20

a. The Company's Proposal

The Company proposed rates for four streetlighting classes: S-1, S-2, S-3, and S-20. Rate S-1 applies to customers for whom MECo owns and maintains streetlights and supplies electricity for those lights (Exh. MECo-4, at 33). Rate S-2 applies to overhead installations where the customer owns the light and MECo provides maintenance and electricity (id.). Rate S-3 applies to underground installations where the customer owns some or all of the facilities supplying service and MECo provides maintenance and electricity (id. at 33-34). The S-20 rate applies to customers on the S-1 rate who participate in the Company's sodium vapor luminaire conversion program (id. at 34).

For Rates S-1 and S-20 the Company proposed to collect their total revenue requirement and also increase the price differential between the sodium vapor lighting and the less efficient mercury vapor and incandescent lighting (Exh. MECo-4, at 34, exh. PTZ-15). For Rates S-2 and S-3, the rates were designed to collect the total revenue requirement, for each class including the collection of operation and maintenance expenses (id.).

b. Analysis and Findings

Based on its cost allocation decisions in this case, the Department is concerned that the resulting rates based on equalized rates of return may violate the Department's goal of rate continuity for some rates within a class. Accordingly, the Department directs the Company in its compliance filing to cap the revenue requirement percentage increase for Rates S-2 and S-3 at three times the Company's overall percentage increase on base revenues and recover the remaining revenues from within that class.

D. Terms and Conditions

1. The Company's Proposal

The Company proposed to change four sections of its Terms and Conditions. First, the Company proposed to increase the returned check fee from $5 to $15 (Exh. MECo-4, at 36). According to the Company, $15 is reasonable because the processing costs for a returned check is greater than $15 (id. at 36, exh. PTZ-17; Tr. V, at 33).

Second, the Company proposed additional language to its current Terms and Conditions in order to protect against deterioration of a customer's service because of another customer's actions, such as, the use of some types of welding equipment (Tr. 5, at 33-34). The Company's proposed changes include the ability to correct and charge the customer for harmonic distortions on its lines that are caused by the customer's equipment (id.). Harmonic distortion contributes to the improper functioning of computer equipment at other customer's facilities (id. at 37; Tr. 5, at

33-35).

Third, the Company proposed changes to its line-extension policy. The Company's proposed policy allows construction of up to $10,000 worth of facilities with applicable taxes at no cost to the customer (id.). Any amount over $10,000 would be paid for by the customer (Tr. 5, at 36-39). The Company's current policy includes the $10,000 limit for C&I customers, but no limit for residential customers (id.).

For its residential customers the Company proposed to maintain its current policy for payment of construction advances and the addition of new customers (id.). C&I customers, under the Company's proposal, would have the option to pay the construction costs above $10,000 or sign a Service Extension Agreement ("SEA") with MECo, wherein the customer would agree to give five-years notice prior to generating additional electricity for their own use or purchasing electricity from another supplier (id. at 36).

Finally, the Company proposed an option for customers to buy down their notice period under an SEA to three years (Exh. MECo-4, at 38). Under the buy-down policy the customer would pay the Company the estimated original cost of construction used at the time the construction was undertaken (id.).

2. Analysis and Findings

It is the Department's policy to review a company's Terms and Conditions during a rate investigation to ensure that they accurately reflect Department regulations. The Department views the Company's Terms and Conditions as the one document to which customers of the Company should be able to refer for an accurate description of their rights and obligations vis-a-vis the Company.

The Department finds that the Company's proposed changes to its Terms and Conditions are reasonable and consistent with the Department's goals. However, the Department finds that some of the tariff language proposed by the Company may lead to customer confusion. For example, in paragraph four of the proposed Terms and Conditions the Company states "[t]he Company shall supply standard residential service to a Customer or group of Customers at no cost to the Customer when the Company's total cost of construction does not exceed $10,000." In this sentence the Department finds that the phrases "standard residential service" and "group of Customers" are not clear. Accordingly, the Department finds the proposed changes to the Terms and Conditions are conditionally acceptable; however, the Department directs the Company to develop appropriate language for the Terms and Conditions with the Department's Consumer Division, and include the revised language in the Company's compliance filing.

VIII. INDUSTRY RESTRUCTURING

A. Incentive Regulation

In D.P.U. 95-40-A, the Department denied the Company's incentive proposal. The Department found a number of deficiencies in the incentive proposal and noted that several of the deficiencies were a result of the fact that the proposal was designed, in large part, to recover the revenue shortfall requested by the Company in its current rate filing.[80] Id. at 21. The Department stated that by using the revenue requirement determined by the Department in this proceeding as a starting point, the Company should be able to redesign an incentive proposal to address the identified deficiencies. Id. The Company agrees and states that its redesigned incentive would

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[80] The Department also encouraged all companies to develop even broader incentives for efficient fuel procurement. D.P.U. 95-40-A at 21.

focus on the future with a high standard of performance, an appropriate balance of risk and reward, and solid standards for safety, service reliability, and customer service (Company Brief at 2). The Company notes that a redesigned proposal could be made as an independent filing or included in a broader proposal associated with its industry restructuring proposal (id. at 2 n.2, noting D.P.U. 95-30).

In its investigation into incentive regulation, the Department established the standard of review and criteria for evaluation of incentive proposals. Incentive Regulation, D.P.U. 94-158, at 52-66 (1995). Recognizing fundamental change in the regulation of gas and electric utilities, the Department encouraged jurisdictional gas and electric utilities to design and propose incentive plans as soon as possible. Id. at 65.

The Department has viewed incentive regulation as part of an ongoing evolution in regulatory policy, and a precursor to more significant change. D.P.U. 95-30, at 11. In its investigation into industry restructuring, the Department stated an overall goal of developing an efficient industry structure and regulatory framework that minimizes costs to consumers while maintaining safe and reliable electric service with minimum impact on the environment. Id. at 13. The Department stated that increasing competition and allowing market forces to operate are the most effective means of increasing the efficiency and lowering the costs of providing electric service. Id. The Department noted that as the electric industry is transformed to incorporate greater competition, different circumstances will result in different levels of regulatory review and that transmission and distribution of electricity would continue to require regulatory oversight. Id. at 28.

Clearly, the Department views incentive regulation as an important component of industry restructuring, both in handling the transition issues of moving to a competitive generation market, and in the regulation of the transmission and distribution of electricity. In making the first incentive proposal to the Department, the Company provided a valuable foundation on which to proceed. The Department notes that the Company is scheduled to submit its industry restructuring proposal in the first round of filings. Therefore, the Department directs the Company to include its redesigned incentive proposal with its industry restructuring proposal. Such a proposal should be consistent with D.P.U. 94-158 and D.P.U. 95-40-A.

B. Customer Service

The goal of the Department's quality of service review is to provide the Department with information necessary to identify and remedy any inadequacies in the Company's provision of service. New England Telephone, D.P.U. 89-300, at 306 (1990).

The Company asserted that it conducts a customer satisfaction survey once a year; however, the Company relies on the Department's Consumer Division complaint reports which are compiled more frequently (Tr. 3, at 88). According to the customer satisfaction surveys submitted by the Company, the most frequent complaints from customers relate to customer service (RR-DPU-8, C&I Survey, Second Quarter at 13).

With the emerging restructuring of the electric industry, some level of regulatory oversight is necessary to protect against a reduction in customer service quality. D.P.U. 94-50, at 235. The Company did not establish that it collects sufficient information or has reliable data on the current level of customer service. Therefore, the Department directs the Company to present its plan to address customer service issues, including its plans to document customer communications, with its industry restructuring proposal.

IX. ORDER

Accordingly, after due notice, hearing, and consideration, it is

ORDERED: That the tariffs M.D.P.U. Nos. 893 through 908 filed by Massachusetts Electric Company on March 15, 1995 be and hereby are DISALLOWED; and it is

FURTHER ORDERED: That the Massachusetts Electric Company shall file new schedules of rates and charges designed to produce total additional annual base rate revenue of $30,949,000; and it is

FURTHER ORDERED: That the Massachusetts Electric Company shall file all rates and charges in compliance with the requirements of this Order; and it is

FURTHER ORDERED: That the Massachusetts Electric Company shall comply with all other orders and directives contained herein; and it is

FURTHER ORDERED: That the new rates filed by Massachusetts Electric Company shall apply to electric service consumed on or after October 1, 1995, but unless otherwise ordered by the Department, shall not become effective until a filing that demonstrates that such rates comply with this Order has been approved by the Department.

By Order of the Department,

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Kenneth Gordon, Chairman

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Mary Clark Webster, Commissioner

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Janet Gail Besser, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal may be filed with the Secretary of the Commission within twenty days after the date of service for the decision order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of Said Court.
(Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).